

Argyll and Bute Council  
**ROTHESAY**

# ACTIVE TRAVEL ROUTE



benton scott-simmons

**nick wright planning**  
people - place - planning

**B** BARRETT COMMERCIAL  
MANAGEMENT CONSULTING

**Nicol Urban Design**

WMUD

**M-HB**  
CONSULTING CIVIL ENGINEERS

**HEL**  
HERITAGE  
ENVIRONMENTAL  
LIMITED

**icecream**  
architecture

# Rothesay | Active Travel Route

Benton Scott-Simmons  
Willie Miller Urban Design  
Nick Wright Planning  
icecream architecture  
Nicol Urban Design  
MHB Consultants  
Heritage Environmental  
Barrett Commercial

*on behalf of Argyll & Bute Council  
with HITRANS and Sustrans*

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## contents :

<b>1.0 Context</b>	<b>06</b>
1.1 Where we restart	
1.2 Aims / Objectives / Principles	
1.3 Needs	
<b>2.0 Project Status</b>	<b>08</b>
2.1 Stage 2 route options appraisal	
2.2 Topographic and Ground Investigation surveys	
2.3 Preliminary Ecological Survey (PEA)	
2.4 Summary of C3 utilities identification	
2.5 Parking Survey	
<b>3.0 developing the stage 3 developed design approach</b>	<b>12</b>
3.1 Project methodology / Approach	
<b>4.0 Engagement</b>	<b>22</b>
4.1 Introduction	
4.2 Narrative and objectives	
4.3 Participants	
4.4 Engagement stages	
4.5 Engagement Outputs	
<b>5.0 Preferred Design</b>	<b>24</b>
5.1 The key design principles	
5.2 A consistent palette of materials	
5.3 Approach to car parking	
5.4 Surface water management and drainage strategy	
5.5 Signage and line markings	
5.6 Lighting Strategy	
5.7 Traffic Regulation Orders	
5.8 Vehicle Swept Path Analysis	
5.9 Road Safety Audit	
5.10 Land Take Plans	
5.11 Section 1 - 'Castle' 20mph zone	
5.12 Section 2 - 'Mid High Street' 20mph limit	
5.13 Section 3 - 'Townhead' 20mph zone	
<b>6.0 Costs</b>	<b>46</b>
6.1 Preparation of DRAFT Bill(s) of Quantity	
6.2 The contractual impact of being on an island	
6.3 cost estimate	

<b>7.0 Delivery</b>	<b>47</b>
7.1 Construction sequencing	
7.2 The importance of the 'route'	
<b>8.0 Monitoring and Evaluation</b>	<b>48</b>
8.1 The aim	
8.2 Targets	
8.3 Indicators	
8.4 Evaluate	
8.5 Potential Monitoring Partners	
8.6 References	
<b>9.0 Next Steps</b>	<b>50</b>
9.1 Stage 4 priorities	
9.2 Imminent Changes	
9.3 Future Changes	
<b>10.0 The team : roles and responsibilities</b>	<b>51</b>
10.1 Team	

## Figures

- a. the study area (WYG/StreetsUK Rothesay potential Cycle Route : Primary and Alternative Route Fig 3.1 Stage 2)
- b. destinations plan (WMUD)
- c. urban design sensitivities plan (BSS)
  - c.1 urban design sensitivities plan
  - c.2 urban design sensitivities plan with adjacent sensitivity key
- d. zonal influencing factors table (BSS)
- e. psychological traffic calming intervention sketches (BSS)
  - e.1 psychological traffic calming intervention sketches - Zone 1 & 2
  - e.2 psychological traffic calming intervention sketches - Zone 2
  - e.3 psychological traffic calming intervention sketches - Zone 5
  - e.4 psychological traffic calming intervention sketches - Zone 6
- f. Rothesay 'New School Run' engagement
  - f.1 Rothesay 'New School Run' : engagement poster
  - f.2 Rothesay 'New School Run' : engagement website
- g. illustrative masterplan (WMUD)
  - g.1 illustrative masterplan - section 1
  - g.2 illustrative masterplan - section 2
  - g.3 illustrative masterplan - section 3
- h. general arrangement plan (MHB)
  - h.1 general arrangement plan (1)
  - h.2 general arrangement plan (2)
  - h.3 general arrangement plan (3)
  - h.4 general arrangement plan (4)
  - h.5 general arrangement plan (5)
  - h.6 general arrangement plan (6)
  - h.7 general arrangement plan (7)
  - h.8 general arrangement plan (8)
  - h.9 general arrangement plan (9)
  - h.10 general arrangement plan (10)
  - h.11 general arrangement plan (11)
  - h.12 general arrangement plan (12)

## Document 2 - Appendices

### Rothesay ATR Appendices

- A. Topographic and Ground Investigation Survey(s)
- B. Utilities plans (C3 utilities identification)
- C. Preliminary Ecological Appraisal (PEA)
- D. Parking survey
- E. Engagement Strategy
- F. EqIA
- G. Behaviour Change Plan
- H. General Arrangement drawings (1:500)
- I. Supporting cross-sections
- J. Proposed Phasing Strategy Plan
- K. Surface water management and drainage proposals
- L. Signage and line markings
- M. Lighting Strategy
- N. Traffic Regulations Orders (TROs)
- O. Vehicle Swept Path Analysis
- P. Road Safety Audit(s)
- Q. Land Take Plans
- R. Designers Risk Register



## 1.0 Context

### 1.1 Where we restart

In March 2021 Argyll and Bute Council commissioned the technical team led by Benton Scott-Simmons to prepare a developed design for the next stage of Rothesay’s safe active travel route between Rothesay town centre and the Joint Campus, Townhead. This commission builds upon the earlier work undertaken by WYG and StreetsUK which identified a primary cycle route following public engagement in 2019 on three potential route options.

#### Cycling by Design

Since the original work was undertaken Transport Scotland has revised their guidance document to take account of project experience and the current version referred to in this report is ‘Cycling by Design 2010 (Revision2, July 2020).

The first task would be to review the proposed preferred route against this new guidance.

“Cycling contributes towards national and local policy objectives to reduce emissions, tackle congestion, increase tourism and improve physical and mental health. Cycling also aids accessibility and social inclusion objectives.”

#### COVID

In March 2021 Scotland was still under lock-down due to the COVID pandemic so the team had to adopt a methodology for site work and engagement that met restrictions whilst still being fit for purpose. Fortunately, lock-down restrictions were eased as the initial desk top reviews were being completed and the technical surveys were able to be undertaken without a significant impact on the programme.

The COVID pandemic has raised the importance of **health and wellbeing** and there is now a greater awareness of the **value of public greenspace**. This has coincided with a greater recognition that we are in the midst of a **Climate Emergency** and our behaviour needs to be modified to address this.

The climate exchange.org.uk confirms that transport is responsible for over 30% of the greenhouse gas emissions in Scotland.

Active travel based on human physical activity such as walking and cycling is prioritised in The Sustainable Travel Hierarchy which sets out securing a green recovery towards net zero: climate change plan 2018-2032.

Figure 3.1 Rothesay Potential Cycle Routes

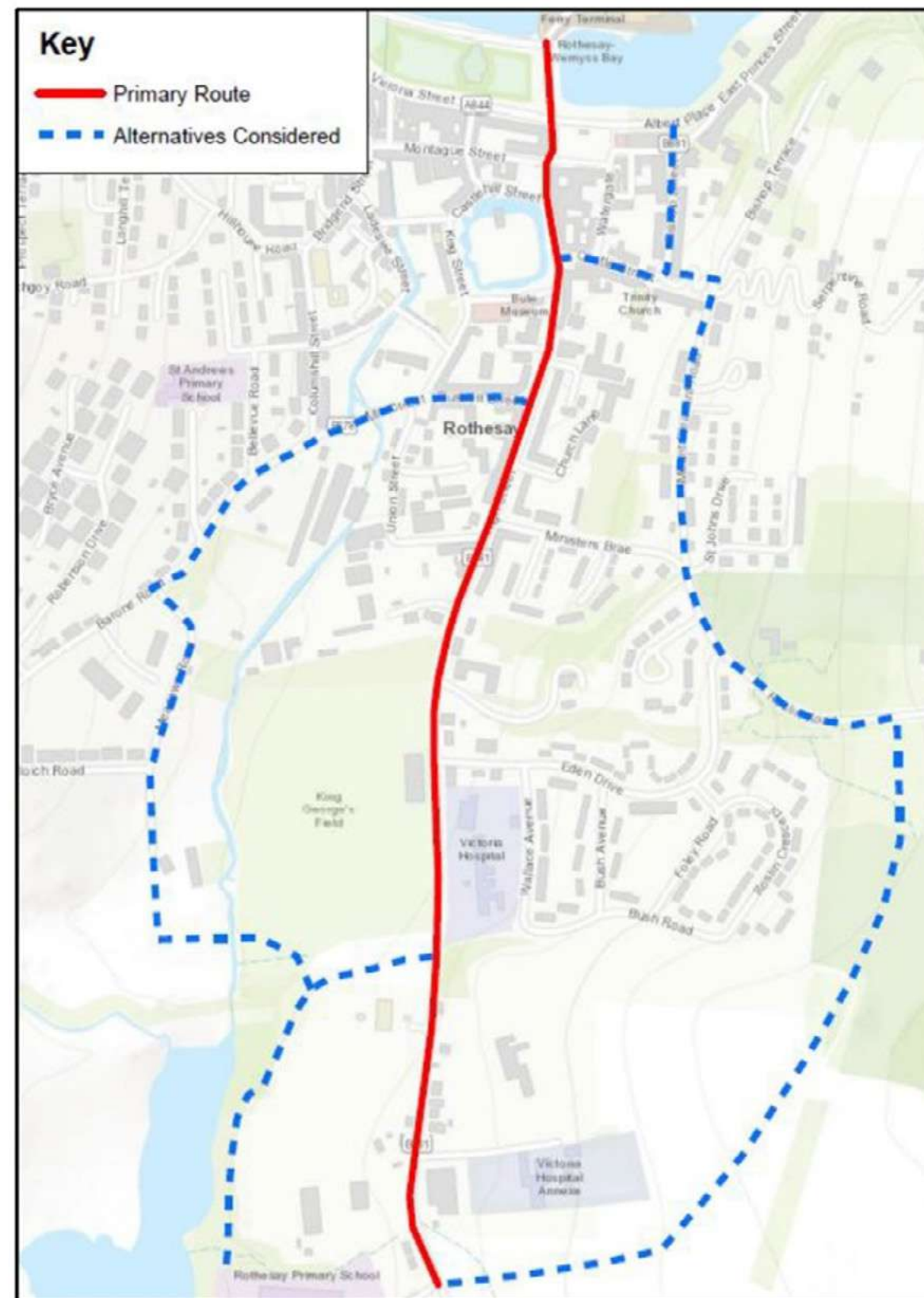


Figure a. the study area (WYG/StreetsUK Rothesay potential Cycle Route : Primary and Alternative Route Fig 3.1 Stage 2)

*“Getting people out of their cars would have great benefits for emissions, congestion and air quality, and it would be good for our health. The Climate Change Plan update sets a target to reduce the distance we travel by car by 20% by 2030.”*

Climate x change

Despite Rothesay’s low car ownership and relative proximity of the schools’ campus to the adjacent residential areas there is major vehicle congestion in the Townhead area of the town caused by pupils being driven to and from school. The development and engagement associated with the developed design stage of this project was named ‘**Rothesay’s New School Run**’ as it explores what design changes could help create a new school run: a safe and active travel route.

### 1.2 Aims/Objectives/Principles

It is important that any active travel route is convenient and inclusive. This project aspired from the outset to provide a high-quality facility which exceeds the ‘**Desirable Minimum**’ set out in guidance – considered the minimum design requirement for providing a good quality facility. The natural topography and existing built urban form within this part of Rothesay presented serious constraints which required a creative approach to reach a resolution where only the ‘**Absolute Minimum**’ solution was feasible.

The defining factor is the lack of room within the High Street cross-section to provide optimal widths for all three categories of user group: walking/ cycling / or wheeling. It became evident early in the project that the delivery of a 5m wide segregated cycle lane considered as the ‘Desirable Minimum’ was not feasible.

It was critical that:

- The benefit to **pedestrians** should be enhanced and not merely, neutral
- The benefit to and safety of those **wheeling and cycling** should also be enhanced
- That whilst **motorists** needs will be met in full, this is important in an island community, prioritising the needs of pedestrians and those wheeling and cycling will require a **behaviour shift**. Motorists need to be more considerate in this location and adjust their behaviour to ensure that a safe and active travel route ‘The Rothesay School Run’ can be delivered for the benefit of all.

*“Perceived and actual safety and route attractiveness are the principal concerns of children and their parents. Children will be motivated to cycle if it is perceived to be enjoyable and this is reflected in the actual experience”*

Cycling by Design

The overarching objective is to provide a safe active travel route to school that can be used by all children walking or wheeling and in addition is suitable for an unaccompanied, 12-year-old child to cycle unaccompanied.

### 1.3 Needs

Rothesay, the **principal settlement** on the island of Bute and renowned as a Victorian Clyde Coastal resort town, has **significant levels of deprivation**. Two zones within the identified study area are within the top 10% SIMD areas; two zones within the top 20% and a further two zones within the top 30%. This is reflected in a **low car ownership** on the island, despite rural island community’s reliance on private cars due to the infrequency of other modes of public transport. Providing a safe route to school which prioritises walking, wheeling and cycling allows an **egalitarian** and inclusive solution that can be **accessed by all**.

This unique condition influenced the development of the **engagement strategy** and the **behaviour change programme**. If space is significantly constrained what physical and psychological interventions need to be considered and curated to provide the desired change in character on High Street moving its perception as ‘road’ to that of a ‘street’.

### References

- i. Cycling by Design 2010 (Revision 2, July 2020)
- ii. climate x change

## 2.0 Project Status

### 2.1 Stage 2 route options appraisal

At the outset of the project the Stage 3 Team undertook an options appraisal of the Primary Route proposed by the WYG Team, together with their alternative route in the east and their alternative route to the west. These were benchmarked against a ‘light touch’ route which was informed by the Stage 3 Team’s desk top study and considered the recent changes in Sustrans’ guidance.

The routes were assessed across the following criteria:

<b>technical</b>	compliance with Cycling by Design
	gradient (av.1:43 / steepest 1:19)
	directness (length)
	minimum requirement for carriageway realignment
	minimum requirement for junction realignment
	geotech issues
	legibility (consistency of approach)
<b>cost</b>	based on estimate
<b>delivery</b>	single phase
	split phases
	complex
	temporary works
<b>fit with historic townscape</b>	respectful
	permanence (robustness / future flexibility)
	opportunity for wider enhancement
<b>destinations</b>	connectivity : linking to key destinations
<b>attractiveness to novice cyclists</b>	affords natural surveillance
	slows traffic speeds / encourages better motoring habits
	legibility : recognisable route / intuitive for users
<b>engagement</b>	development of route identified through community engagement
<b>funding</b>	satisfying required criteria
<b>most successful</b>	benchmark - ‘can be used safely by an unaccompanied 12 year old’

The options appraisal concluded that when assessed across the above criteria the alignment of the **Primary Route identified at Stage 2** performed the best. Importantly, this route had been identified as part of the previous engagement process. This stage of the study focussed on how this alignment could be **adjusted and developed** to meet the new requirements.

### 2.2 Topographic and Ground investigation surveys

MHB Consultants Limited (MHB) undertook a detailed **topographical survey** of the High Street corridor to inform the detailed design. This included Guildford Square, a section of Victoria Street and a significant part of the King Georges Field park area. The survey has been used in the preparation of detailed drawings of the scheme at 1:500 scale. The survey will be sufficient to support drawing at 1:200 in locations where more detail is required.

MHB Consultants Limited (MHB) has completed a **Phase 1 Report** providing a **desk-based assessment** of the principal issues associated with the ground conditions at the site including geotechnical and potential soil and groundwater contamination.

The preferred option for the route is based on the continuous shared use facility between Rothesay Town Centre and Rothesay Joint Campus on the west side of the B881/ High Street including raised crossing points at junctions to ensure priority for pedestrians and cyclists.

Based on the desk-based assessments completed the following **principal points** are noted:

- MHB concludes that the soil and groundwater contaminant conditions generally constitute a LOW overall risk to the proposed development and the wider environment;
- No significant potentially contaminative historical land uses have been identified along the route with any such activities in the general vicinity likely to have been addressed as part of general development of the town. Localised areas of contamination may, however, be encountered during construction of the new cycleway;
- Similarly, the proposed co-location of the new cycleway along the route of the existing highway indicates that significant geotechnical constraints are unlikely generally along the route although confirmation of the ground conditions will be required in any areas where significant earthworks and/or excavation are required, for example, if any significant changes in grade are necessary;
- Confirmatory investigations/assessments are currently considered necessary in advance of the proposed construction works with a view to confirming the absence of contaminated land risks and to support any geotechnical design decisions where earthworks are required.

A full copy of this information is included in the separate Appendices document, reference **Appendix A**.

### 2.3 Preliminary Ecological Survey (PEA)

The alignment of the Primary Route is largely confined to an urban/ suburban environment with associated parkland and other more open spaces to the south beyond the Joint campus.



The potential effect of the proposed works is summarised below:

**Central Lochs SSSI** The project lies within 100m of the north end of the Central Lochs, Bute Site of Scientific Interest (SSSI)  
The presence of the Joint Campus within 50m of the SSSI would mean that this section **may already be subject to high levels of disturbance.**

**Flora** Impacts of the proposed project are **not considered to be ecologically significant** with regards to flora.  
Limited areas of species-poor parkland and amenity grassland of Negligible or Local Value will be lost due to the development, but are **not considered to be ecologically significant.**

**Otter** **No evidence** of otter places of shelter was recorded within the study area.  
No avoidance or mitigation measures are required.

**Bats** Although potentially suitable bat roost features have been identified within the study area, it is **unknown at this stage** whether compensation or mitigation measures are required for bats.

**Reptiles** **Do not represent an ecological constraint** and no further survey, avoidance, mitigation or compensation measures are recommended.

**Birds** Loss of breeding bird habitat as a consequence of the proposed works is likely to be **temporary and limited** to minimal vegetation clearance.

The following avoidance measures should be adhered to ensure that residual impacts of the project are **not ecologically significant.**

**Bats** It is recommended that the works associated with the proposed project (including any pre-development felling) is **planned to minimise the potential disturbance** to bats and **loss of potential roosts** by avoidance.  
In order to ensure legal compliance, it is recommended that a 10m **exclusion area** around all potential bat tree roosts is established by the Ecological Clerk of Works (ECoW)  
**Further survey recommended.**

Bat surveys should be undertaken by a team of experienced and licensed bat surveyors (refer to **Appendix C** for detailed requirements)

**Breeding birds** **Avoidance measures** are required if the proposed project works are planned during the breeding bird season (generally defined as mid-March to mid-August, although some species may breed out with this period)

**Further survey recommended.**

The PEA recommends that consideration be given to **Biodiversity Net Gain (BNG)** adopting an approach where development leaves biodiversity in a better state than before.

In addition to the above, where **tree works** are necessary as part of the construction works (including felling and other manipulations e.g. pruning, works that affect the rooting system) we would recommend an initial tree constraints survey - **“Trees in Relation to Design, Demolition and Construction to Construction - Recommendations” (BS 5837) (2012)**, details the steps that should be taken to ensure that trees are appropriately and successfully retained when a development takes place. Where there are trees either on a potential development site or within close proximity to the site, the local authority will consider them when making decisions on planning applications for that site.

A full copy of this information is included in the separate Appendices document, reference **Appendix C.**







## 2.4 Summary of C3 utilities identification

Nicol Urban Design Limited (NUD) commissioned Site Investigation Services (UK) Limited (SIS) a full utilities search for the High Street corridor including Guildford Square and the King Georges Field areas.

Responses are summarised below.

organisation	utilities present
<b>Argyll &amp; Bute Council</b>	No response however traffic signals and street lighting known to be present
<b>Scottish &amp; Southern Energy (Scotland)(HV)</b>	11KV crosses High St at Montague St 11KV in High St between Castle St & Broadcroft Lane 11KV in High St between Union ST & Eden drive 11KV in High St between park access track (North of church) and Industrial access road (North of Wilkie Houses)
<b>Scottish &amp; Southern Energy (Scotland)(LV)</b>	Distribution mains along High St and adjoining roads. NB: No distribution mains in High St at Victoria Hospital.
<b>Scotia Gas Networks</b>	Low pressure (LP) mains in High St and adjacent roads. LP main ends at School Joint Campus access. NB: Medium pressure (MP) main in vicinity of Leisure Centre
<b>British Telecom (Openreach)</b>	Duct route along High St and adjacent side roads. NB: overhead at Townhead.
<b>Scottish Water (fresh water)</b>	Mains along High St and adjoining roads.
<b>Scottish Water (waste water)</b>	Sewers along High St and adjoining roads. NB: Mainly combined system.

A full list of organisations contacted for the utility search is provided in **Appendix B**.

The full utilities record information can be made available on request.

## 2.5 Parking survey

A parking survey was undertaken by Nicol Urban Design Limited (NUD) in April 2021. Observations were taken in the early morning, at midday and in the evening. Survey locations are presented in drawing form in **Appendix D**, described below and analysed in the table below:

### Existing Parking Summary

type	existing
<b>Bicycle</b>	20
<b>Motorcycle</b>	6
<b>Bus</b>	6
<b>Standard (public)</b>	232
<b>Disabled (public)</b>	5
<b>Standard (private)</b>	197
<b>Disabled (private)</b>	12
<b>Total</b>	<b>478</b>

- Standard parking spaces are 2.5m x 6m when parallel to the roadway, and 2.5m x 5m when perpendicular
- Disabled spaces are min 2.5m x 6.6m when parallel to the roadway, and 2.4m x 5m with 1.2m space on both sides and to rear
- Public spaces are on-street (i.e. within adopted road)
- Private spaces are off-street (include e.g. school, hospital, leisure Centre, resident only parking)

Car parking survey output showing observed usage is provided in **Appendix D**.

Car parking on the High Street corridor currently has the following characteristics:

**a)** Guildford Square provides disabled parking (2no. spaces) electric car charging (2no. spaces) motorcycle parking and public parking. This serves the main commercial hub of the town, centred on Montague Street. Bicycle parking is located within the square.

**b)** On-street car parking in the town centre is free and therefore tends to dominate the urban space. Many properties, (particularly in the ‘Castle’ zone) do not have off-street parking facilities and therefore rely on on-street parking. There are a high proportion of flatted properties in the town centre leading to pressure on on-street car parking space.

**c)** There are a number of on-street disabled spaces, provided by the local authority in response to requests from residents.

**d)** The police station has a generous area of on-street perpendicular parking but no disabled parking provision. The police station also has vehicular access to the rear of the property providing some further parking opportunity. Consultation with local police representatives indicates that reduced parking to the front of the building would not be a significant problem.

**e)** Much of the on-street parking in the 'Mid High Street' section of High Street is provided in parallel parking laybys. These are of significant length in some places (max 12 vehicles)

**f)** More modern development to the East side of the High Street in 'Mid High Street' (e.g. Mansefield Place) has a mixture of on-street (public) and off-street (private) parking. The number of parking spaces provided is not generous.

**g)** Several properties in the 'Mid High Street' section of High Street rely on on-street parking. This leads to vehicles being regularly parked on High Street, partially on the footway, for prolonged periods causing delays and disruption to traffic and pedestrians.

**h)** There is an large gravel surfaced area at King George's Field incorporating the community recycling facility. Some vehicles were observed parked around the perimeter of this area.

**i)** The Rothesay Leisure Centre has an adjacent off-street car park incorporating 2no. disabled spaces.

**j)** The Rothesay GP Surgery and Victoria Hospital both have off-street parking facilities however these have limited capacity. A small amount of on-street parking adjacent to the hospital was observed.

**k)** Opposite the hospital, within the park, there is an informal gravel surfaced area, connected to High Street by a partially surfaced access track.

**l)** The United Church of Bute marks the start of the 'Townhead' section of High Street. The church has very limited off-street parking opportunities as it is situated within an extensive graveyard. On-street parking is possible on this section of road. As the roadway narrows from 7.25m to 5.7m over the section up to the Hospital Annex access, this can cause significant issues.

**m)** Five properties are located on the East side of Townhead immediately North of the Hospital Annex access road, described as 'The Cottages'. These properties have no off-street parking provision, relying entirely on on-street parking opportunities on the narrowing section described above. Other properties in this area have off-street parking.

**n)** Victoria Hospital Annex is located on a narrow dead-end access to the East of Townhead. Parking in this area is extensive during the day, spilling on to the access road between the hospital annex and the Bute Island Foods industrial unit. Particularly busy periods at the Hospital Annex may currently result in parking spilling onto High Street.

**o)** The Thomson Home (for elderly people) is located on the same narrow access road. This facility has its own off-street parking that is reported to be adequate for current needs.

**p)** Industrial units are located East and West of Townhead between the hospital annex access and a newer industrial access road on the West side, located between the factories and 'The Wilkie Houses' to the South. Most of the parking associated with these units appears to be off-street however it was not possible to accurately determine this at the time of the survey. It is anticipated that some on-street parking results from these operations in normal circumstances.

**q)** The Wilkie Houses are former almshouses located on Townhead near the Schools Joint Campus. These properties have no off-street parking provision, relying on on-street parking on Townhead between the industrial access described above, and the schools access road. This can cause significant disruption to traffic accessing the school.

**r)** Rothesay Schools Joint Campus has a significant off-street parking provision that appears to be adequate. Covered cycle parking is provided however this is remote from the school buildings and not overlooked. To encourage cycle use, consideration should be given to moving the cycle parking closer to the building.

### **Observations**

On-footway parking appears to be a particular feature of parking habits in Rothesay. Partial on-footway parking is common, limiting pedestrian access. Where footways are wider full on-footway parking was observed, particularly around the shore-side road.

At the time of the survey construction work was under way on a new industrial unit for Bute Island Foods on the West side of Townhead, opposite their existing unit. It is assumed that some of the parking observed on Townhead resulted from construction personnel from this project.

At the time of the survey Covid 19 restrictions had not been fully lifted, resulting in some businesses still being closed. The school, industrial premises and many of the shops were however fully operational.



## 3.0 developing the stage 3 developed design approach

### 3.1 Project Methodology / Approach

The **project methodology** adopted by the team was developed specifically to address the challenges presented by this project:

- an **island community**, remote from policy agendas on active travel, green networks, climate change
- a community **exhibiting congestion issues** on High Street albeit car ownership levels on the island are below the national average
- **socially deprived** areas
- both a physical and perceived **separation** between the town in the north and its school campus to the south (approximately 1.3km)
- a natural topography presenting a **challenging gradient** (a change in height of 29m)
- a **historic urban grain** with narrow roads that cannot be reconfigured to cope with modern traffic requirements (5.5m carriageway opposite the castle with only 2m and 1.5m wide footways on the Castle and building sides respectively.)
- a **break in the consultation process** between 2019 and 2021, further exacerbated by the COVID pandemic
- it's a busy high street with a mixture of uses: retail/ residential/ industrial/ educational/ health/ emergency services/ civic and social facilities/ leisure/ cultural and heritage

It was apparent from the outset that the delivery of the desired **improvement to the pedestrian realm** in conjunction with a **high-quality segregated cycle route** between Rothesay Town Centre and the Rothesay Joint Campus could not be achieved as originally conceived at Stage 2.

#### **Identifying the challenge**

The challenge is therefore to **successfully integrate** an active travel corridor into a sensitive, constricted, historic urban context. Rothesay, together with the Isle of Bute as a whole, relies on its **natural and cultural heritage** to support its tourism offer.

The current pandemic has witnessed a seismic shift in **how people see and use their local town centres**. Assessment from the Institute of Place Managers has shown local towns to be more resilient than city centres, many of which have witnessed a 60% drop in footfall, as opposed to **historic or holiday towns** where the drop was only 30%. The critical factor is that towns such as Rothesay already have their own **place 'identity'** - a unique cultural offer that allows them to avoid **the curse of the 'could be anywhere' town or clone town** and to mitigate some of the economic impacts of COVID.

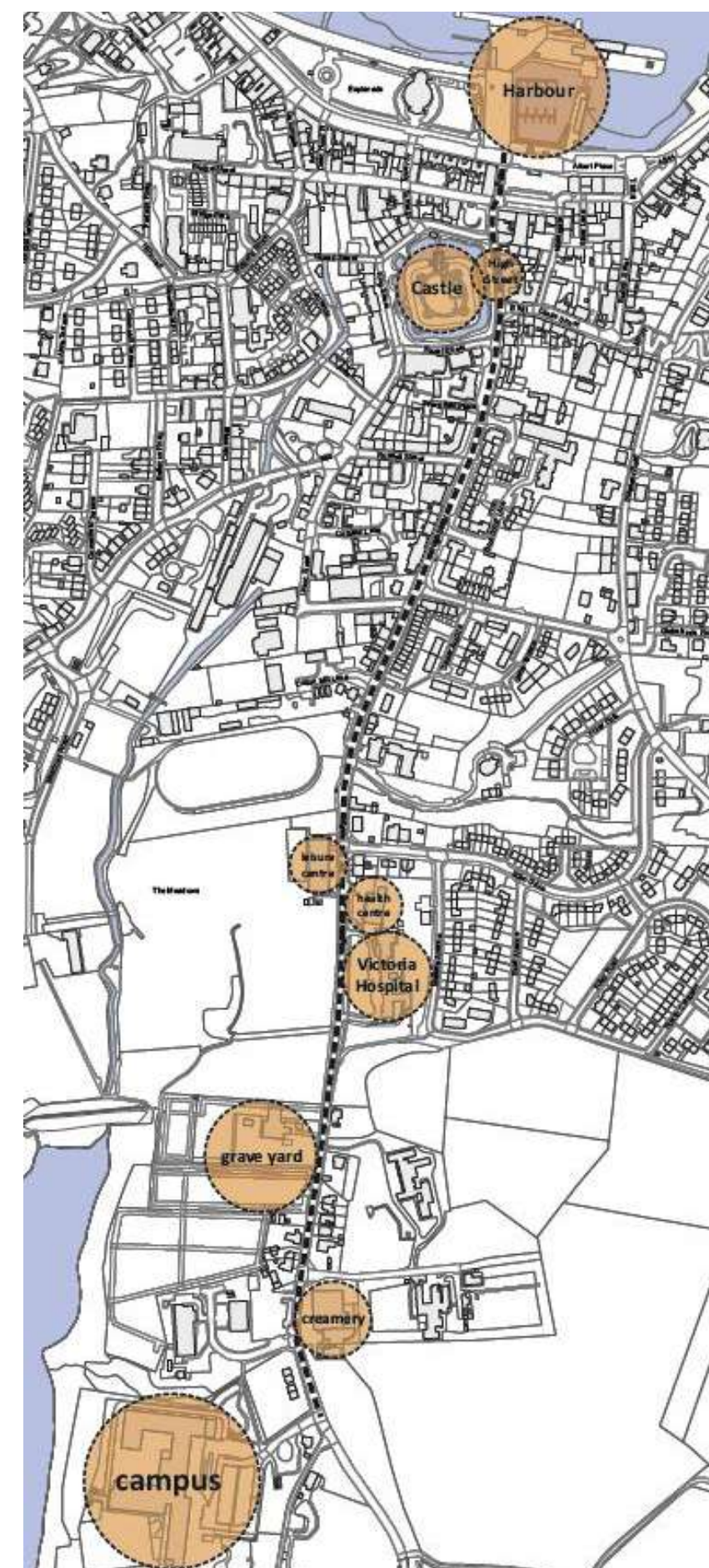


Figure b. destinations plan (WMUD)



**The importance of Placemaking**

The approach adopted recognises that providing an active travel corridor has to go hand in glove with protecting and making explicit Rothesay’s rich cultural and natural heritage – there is an opportunity to allow it to capitalise on its ‘**uniqueness**’ or **USP**.

**Cycle by Design** supports **placemaking** which in turn is about how communities use the place. Change is often perceived as intimidating and many people have difficulty envisioning the future. The focus of our engagement has therefore been on the **people using the place** and **how they use it**.

**Understanding the place**

The initial urban design review considered the division of the route into 7 zones, each with a common characteristics that might influence the design decisions. These were:

Zone 1: Transportation hub	the ferry terminal/ Victoria Road
Zone 2: Retail and cultural hub	Victoria Road to Stuart Street
Zone 3: Transition to residential	Stuart Street to Cotton Mill Lane/ King George’s Field
Zone 4: Open green space	Cotton Mill Lane to St Mary’s Chapel
Zone 5: Church, cemetery and villas	Townhead - St Mary’s Chapel to The Creamery (Bute Island Foods)
Zone 6: Light industrial	The Creamery (Bute Island Foods) to Flexible Technology industrial access
Zone 7: Transition to rural	Wilkie Houses, entrance to Joint Campus and rural edge

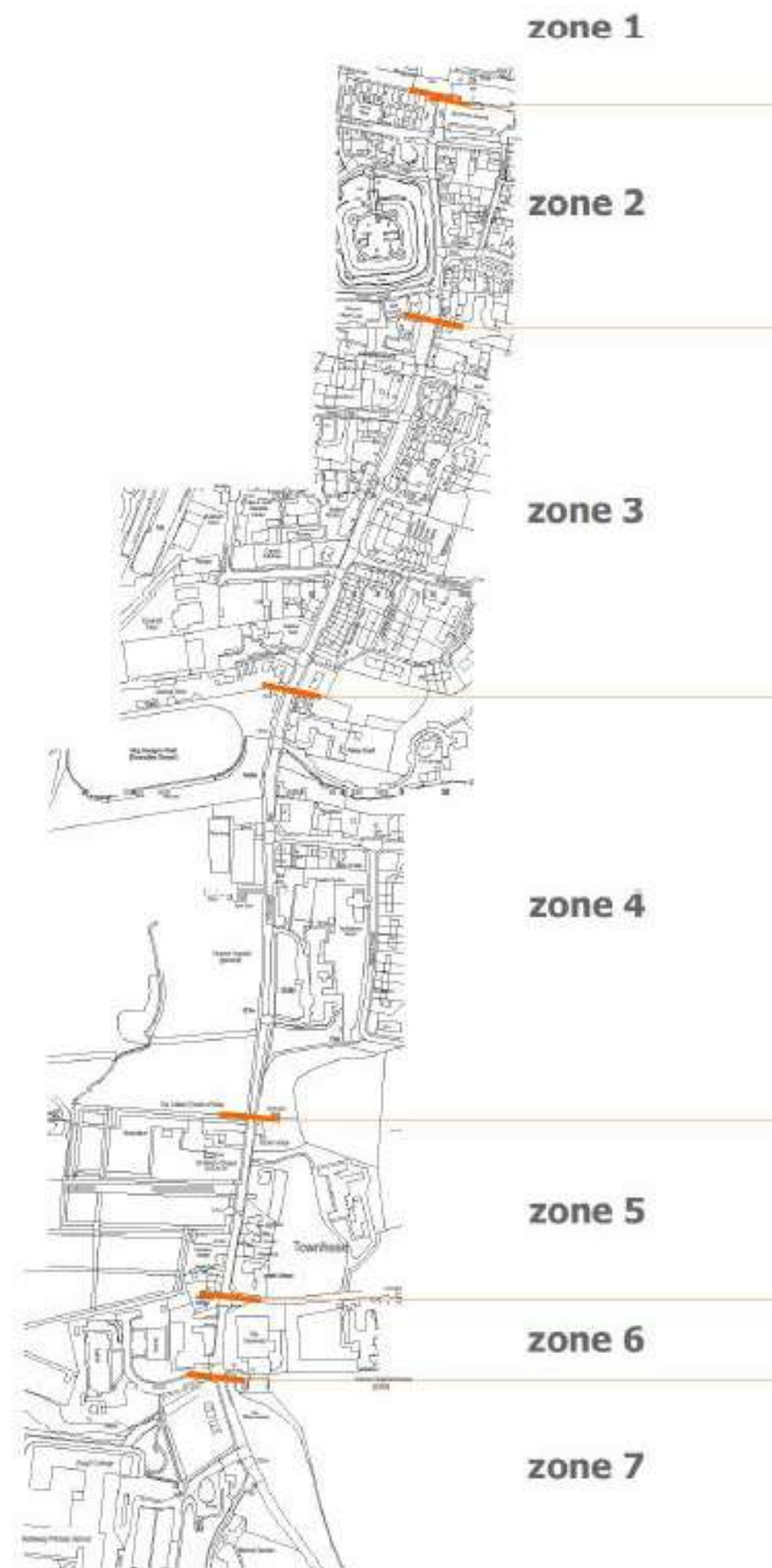


Figure c.1. urban design sensitivities plan

traffic/movement	spatial proportions	built context	other
<b>ZONE 1</b>			
a significant transportation hub	a broad single sided street that is open to the bay	a long curving waterfront elevation faces the ferry port and looks out to the scenic bay	this is the primary arrival point on the island so first impressions matter
a busy area where port activities overlap with tourism and leisure uses	a civic square creates a generous setback at the junction with High Street	many postcard views of Rothesay are taken here	there will be many first-time visitors, so legibility is especially important
the waterfront is a prime destination for visitors, so footfall is high, especially during the summer			there is considerable visual impact from signs and paintwork around the ferry arrival point
patters of movement are complex, with potential conflicts between user groups			
<b>ZONE 2</b>			
This coincides with the retail and cultural hub of the town	a narrow street with carriageway approx. 6m wide and wall to wall dimension approx. 8.5-10.5m	attractive modestly scaled buildings line the street to the east; often with active/ ground floor retail	there is an important cluster of cultural and civic facilities in linked to this part of High Street
busy, with through traffic and public transport using the route combined with heavy footfall drawn by shopping and cafes as well as a cluster of civic and cultural facilities	the castle grounds add green space along the west side giving a more open spacious feel to the street	the iconic Rothesay Castle and surrounding moat defines the west edge of the street; this intimate relationship is special and precious	
<b>ZONE 3</b>			
busy, with through traffic and public transport using the route	The street widens and accommodates stretches of on-street parking	mostly mid 20 <sup>th</sup> c housing development on the east side and 2.5-3 storey 19 <sup>th</sup> c stone-built townhouses and tenements on the west side	
fewer public amenities and facilities means less footfall	many buildings on the east side are set back from heel of footway; those on the west are more commonly on the heel of the footway		
	width varies, with carriageway approx. 7.5-11m wide and wall to wall dimensions approx. 13-20m		


<b>ZONE 4</b>			
through traffic and public transport use the route, as do private cars travelling to the leisure facilities and hospital	open green space on the west side adds a spacious feel	large sheds to the west	the road starts to climb here
	width varies, with carriageway approx. 6-7m wide and back of footway to back of footway dimensions approx. 13-16m	east side is more varied but largely residential and often set back from the heel of the footway	mature trees and hedging along the street edge contribute to a green, less urban character
			open views to hills to the south contribute to a sense of having left the town centre
<b>ZONE 5</b>			
through traffic and public transport use the route; there are few destinations here that daw pedestrians, so footfall is limited	the churchyard provides open green space on the west side; the east is residential, mostly set back from the heel of the footway	the churchyard on the west has a strongly defined street edge but with open ground behind	gradients steepen further here
	carriageway is approx. 6-7m wide and back of footway to back of footway dimensions approx. 7-10m	the east edge is defined by detached stone-built houses set back from the heel of the footway	mature trees and hedging contribute to a green, edge of town character
			open views to hills to the south contribute to a sense of having left the town centre
<b>ZONE 6</b>			
through traffic and public transport use the route	street edges are defined by stone walls and parking areas, with large footprint buildings set well back	industrial buildings either side	gradients slacken slightly here
adjacent industrial facilities mean that heavy vehicles are turning here	the carriageway is approx. 6-7m wide and back of footway to back of footway dimensions approx. 7-10m		there is more greenery here;
footfall is limited			it has an out-of-town character




ZONE 7			
through traffic and public transport heading towards the south of the island use the route	the west edge is open and rural; the east edge has scattered residential buildings set well back from the footway, behind walls or fences	industrial buildings either side	gradients begin to steepen again here
the Joint Campus is a major destination with a large car park	the carriageway is approx. 8-10m wide and back of footway to back of footway dimensions approx. 10-12m		there is a clear sense of approaching open countryside

Figure d. zonal influencing factors table (BSS)

In terms of sensitivity to the impact of the introduction of additional traffic calming elements the zones were evaluated as:

 **Very sensitive** - visual impact of any additional facilities should be minimal/negligible

 **Moderately sensitive**

 **Not sensitive** - additional interventions would not unduly impact the street

Zone	west	east
1	(south)	(north)
2		
3		
4		
5		
6		
7		

In summary, Zones 1 and 2, falling within the historic core of Rothesay are very sensitive albeit the ferry terminal /port is not sensitive in that it has a greater ability to accept change. Zones 3 and 4 transition between moderately sensitive and not sensitive. Zone 5, with St Mary's Chapel, the cemetery and villas is **very sensitive** on the western margin but moderately sensitive along the eastern boundary. Within Zones 6 and 7 there is a clear change in character and they are consequently evaluated as being less sensitive to change.

Using this sensitivity analysis as the basis for **refining the approach to the physical design** the team worked collaboratively to distil a **suite of traffic calming approaches** that could be **used consistently** along the 'New School Run' route. Given the challenge of the constricted physical street sections it is important that the active travel route is **easily recognisable** and interventions are **consistently repeated** to provide a **coherent design intervention** and **recognisable language** for all user groups interacting along its length.

### ***Developing a consistent suite of physical and psychological traffic calming interventions***

Any intervention should aim to satisfy the five core design principles: safety; coherence; directness; comfort and attractiveness.

- **Give space back to pedestrians**
- reduce the carriageway where possible and reallocate the reclaimed space to the footways
- **Reduce vehicle speeds and engender a more considerate driver behaviour**
- introduce build outs to pinch down the carriageway at key locations
- design for a design speed of 20mph (optimum 17 mph for pedestrian safety)
- minimise road markings (for example no centre line) conducive with a street environment
- **Improve accessibility**
- utilise the footway build outs to provide narrower carriageway crossing
- provide regular dropped kerbs along the length of the route
- introduce continuous footways at key side streets
- rationalise the parking into designated spaces to improve visibility
- prevent illegal parking (particularly at crossing points)
- rationalise the siting of elements of street furniture
- **Use elements within the wider public realm to reinforce the ‘street’ environment** create a ‘flexible edge’ of increased roadside activity on the outer edge of the footway
- locate vertical elements such as street trees and lighting columns within the ‘flexible edge’ to contain the road space
- rationalise elements of street furniture within the ‘flexible edge’ to reduce pedestrian hazard
- provide parking and accessible parking within the ‘flexible edge’ zone
- **Use perceptual and psychological interventions to influence driver behaviour**
- create a greater cognitive load by introducing a more complex environment (‘flexible edge’)
- use street trees to bookend parking zones and enclose distant views
- break up linearity of the road corridor
- emphasise changes in the environment by changing the footway and carriageway surfacing
- use ambient lighting to augment street lighting by changing the character at key junctions



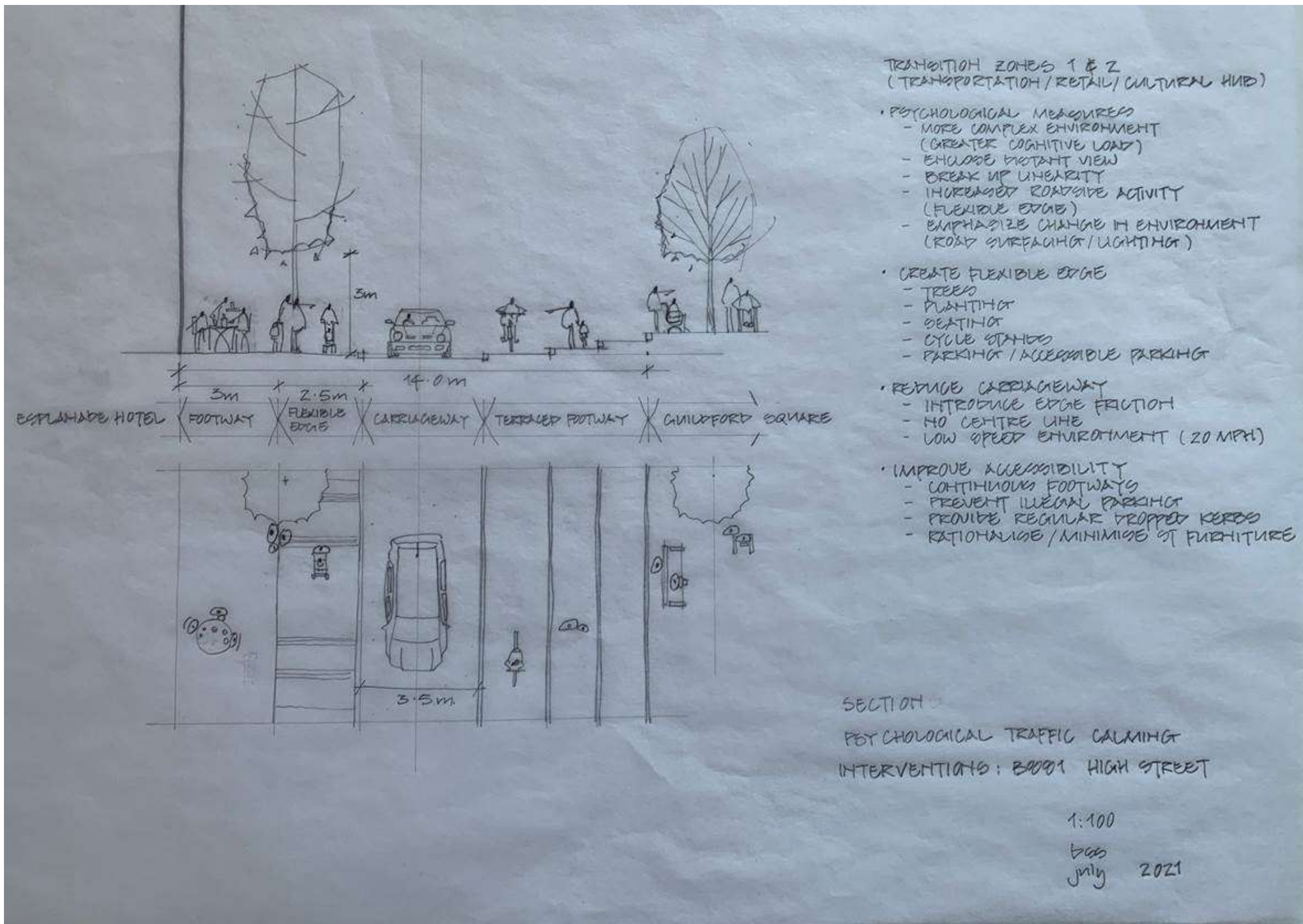


Figure e.1. psychological traffic calming intervention sketches - Zones 1 & 2



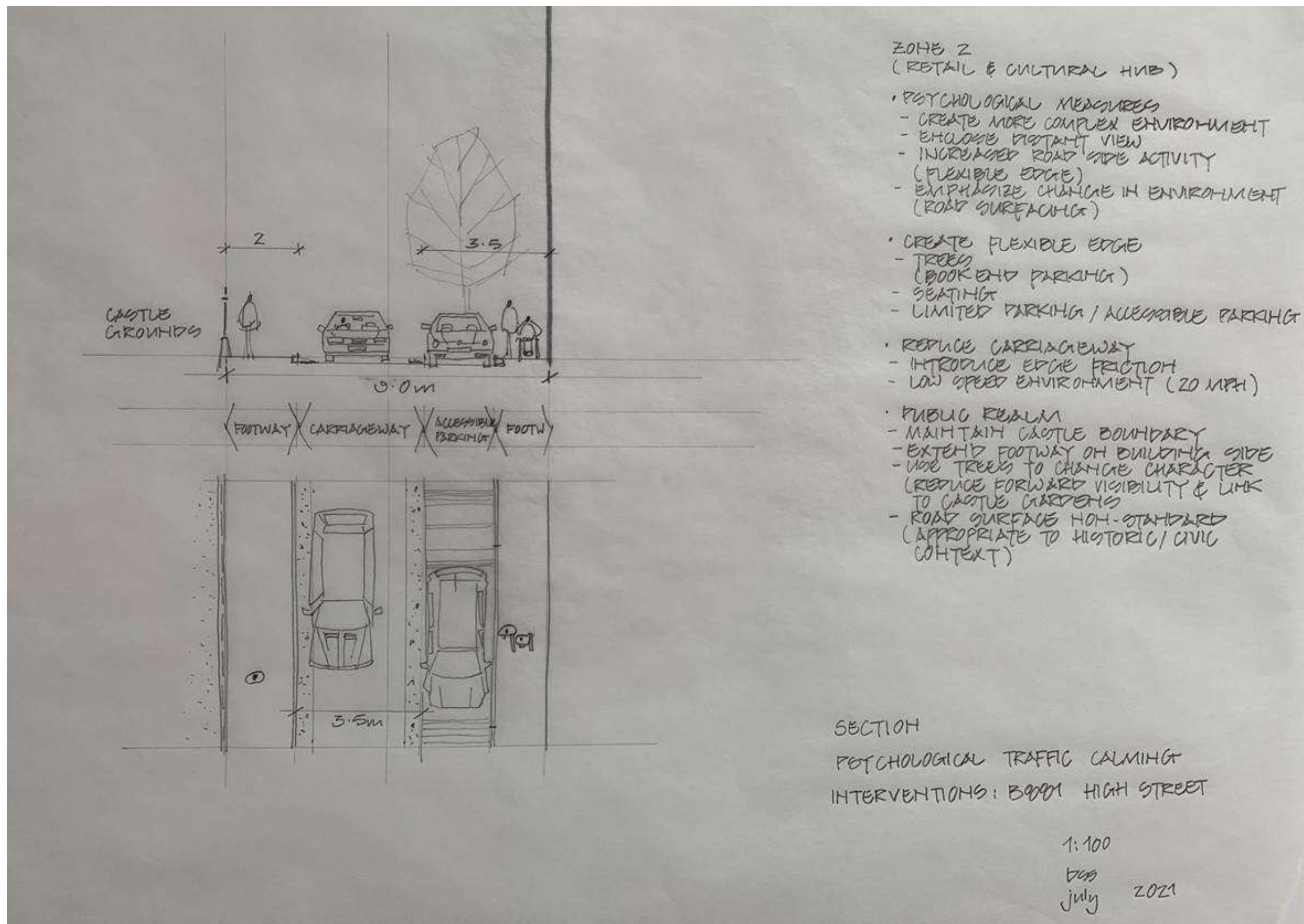


Figure e.2. psychological traffic calming intervention sketches - Zone 2

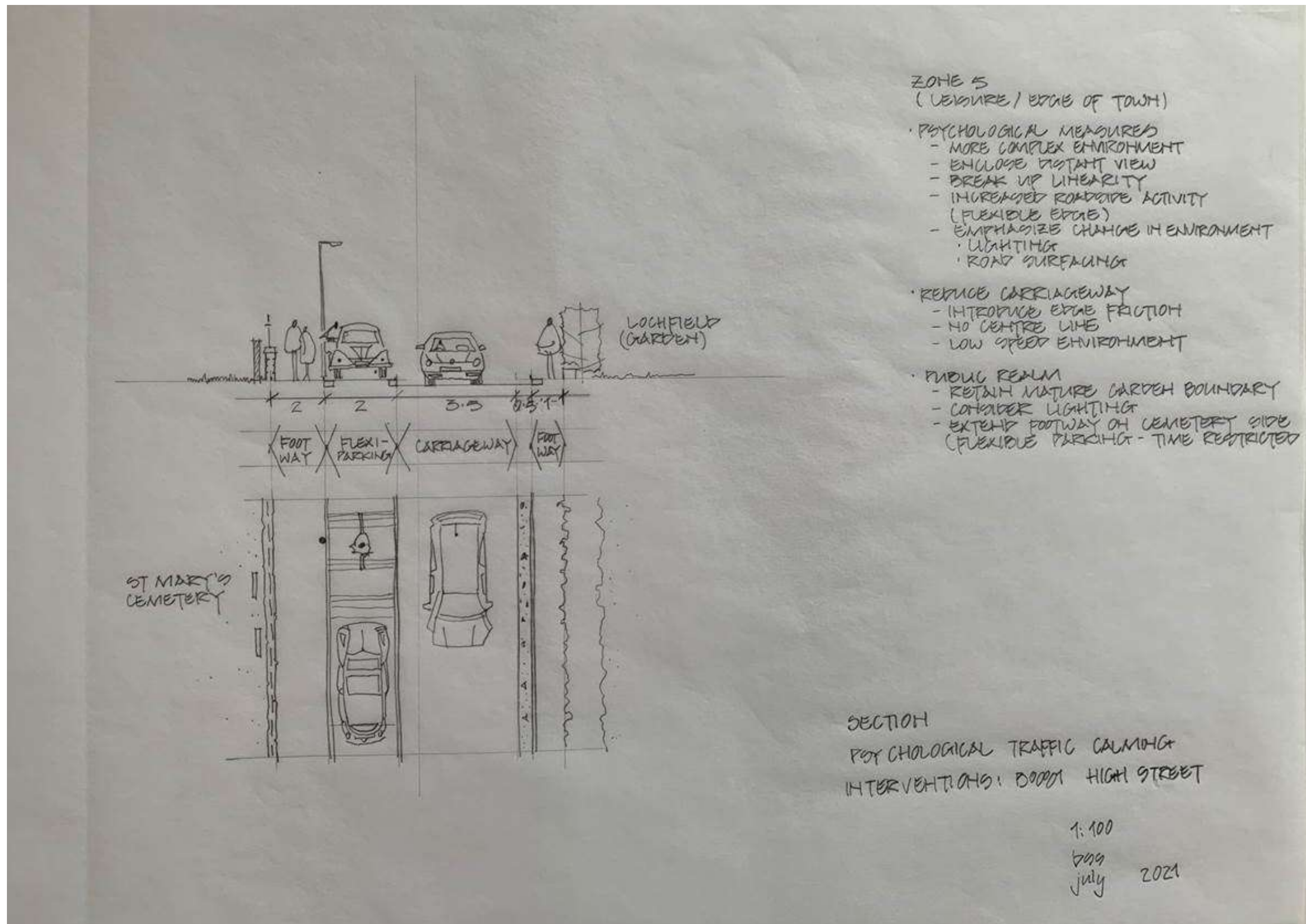


Figure e.3. psychological traffic calming intervention sketches - Zone 5



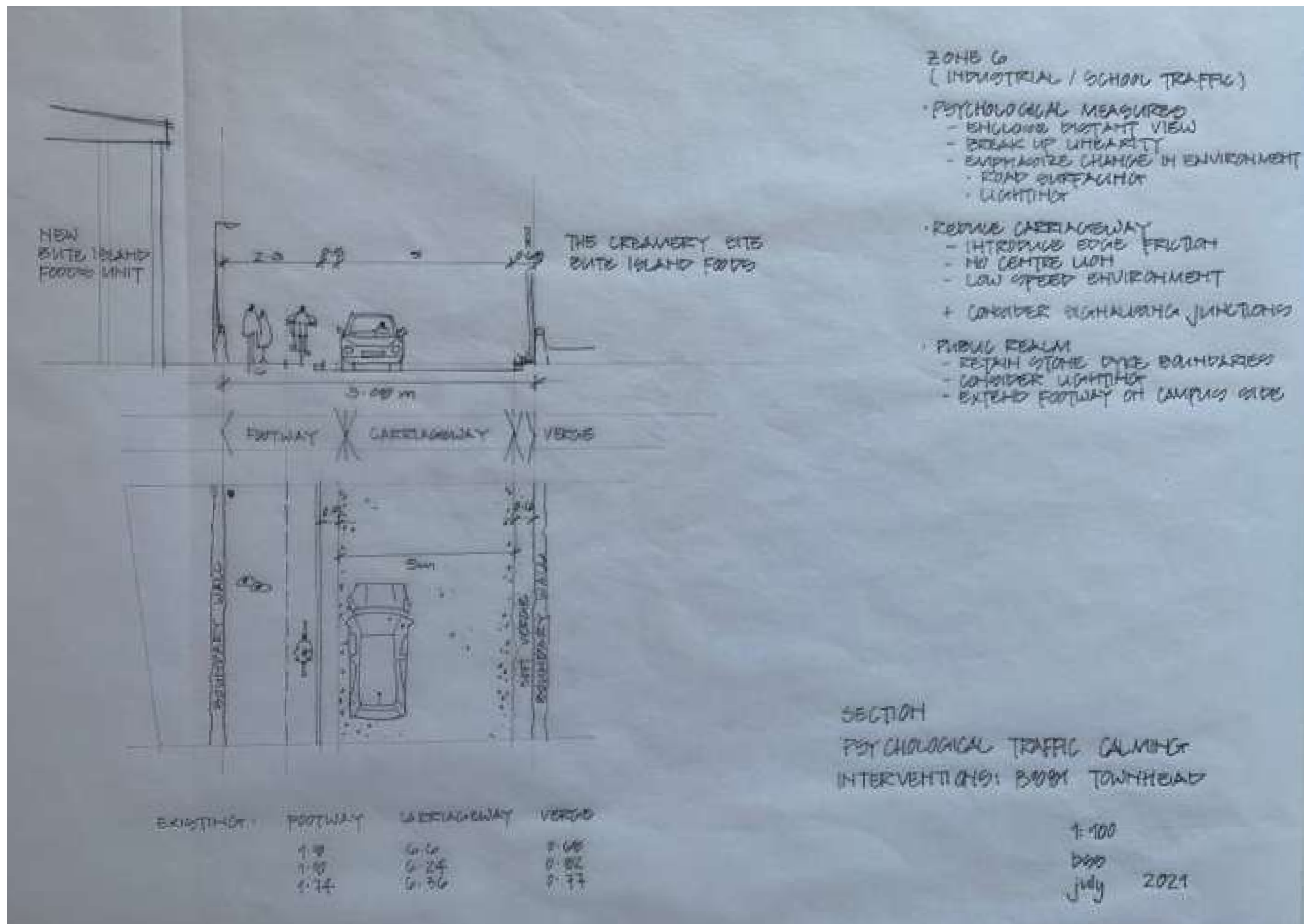


Figure e.4. psychological traffic calming intervention sketches - Zone 6



In addition, the following objectives were also identified as of importance:

- **create a caring and inclusive environment**
- provide frequent resting places (opportunities to sit) along the length of the route
- provide accent nodes on key corners using tree planting, seating and ambient lighting
- introduce street trees where feasible to improve health and wellbeing
- provide bike stands, bike maintenance facilities and bike shelters at key points along the route
- **respect context**
- create a coherent and recognisable 'character' for the 'New School Run' safe active travel route
- use materials of commensurate quality to enhance the immediate context
- use interpretative signing judiciously along the route to make the cultural heritage of the place explicit

In line with Cycling by Design guidance the overarching aim is to **make the existing carriageway safe** for use by cyclists as in this context off-carriageway facilities are not an option.

As this is the key north-south route across the island it is difficult to manage **traffic volume** albeit that most of the tourist traffic exiting the ferry does not use the High Street. Users are predominantly local, over familiar with the route and in the past have ignored traffic control measures introduced by Argyll and Bute Council's Strategic Transportation Engineers to reduce speeds and improve the flow of traffic. Careful consideration is given to how the technical design layout can be used to influence and manage **traffic speed**. **The reconfiguration of key junctions and crossings** is prioritised within the design solution which is further reinforced by the re-allocation of the available space along the length of the route.

The design solution is explained in detail in **Section 5.0 Developed Design**.

## 4.0 Engagement

### 4.1 Introduction

This section provides a summary of the engagement strategy and activities. For more information, please refer to the Engagement Strategy and Engagement Report (separate files).

Community and stakeholder engagement activities were planned at the start of the commission through an Engagement Strategy agreed between the design team, Argyll & Bute Council, Sustrans and HITRANS.

### 4.2 Narrative and objectives

The primary narrative of the engagement was focused on how people, particularly young people, could travel to the Joint Campus by 'active travel' - walking, cycling and wheeling. A secondary narrative to this was to highlight how improving the route to school could improve access to other destinations (e.g. leisure centre, hospital, health centre, workplaces and the park).

Reflecting the primary narrative, the project was branded as Rothesay's New School Run. This set the context and main aim of the design project clearly to audiences. As the design project utilises one of Rothesay's main streets, the benefits in facilitating a 'new school run' to the wider community were included in public communications.

Engagement was integral to the design process. Rather than engagement being a 'tick box' exercise, community input contributed to the selection, design and endorsement of the design proposals. The Engagement Strategy outlined how this would be done in a targeted, informative and transparent manner, with the aim of fostering buy-in and ultimately successful and timely delivery of investment.

Building trust was a key objective: in developing a walking and cycle route as part of a holistic high quality active travel corridor, public and stakeholder engagement at this stage will help to maximise use of the route when completed.

In opening conversations on route design, the team sought to understand:

- How people currently use the route and might in the future.
- Other interventions needed to result in behaviour change within the local community and encourage use of the route once constructed.
- How public spaces along the route might also benefit from improvement.

**ROTHESAY'S  
NEW SCHOOL RUN**

More pupils in Rothesay would like to walk, scoot or cycle to school than currently do. Rothesay's New School Run is a design project to define what changes are needed, after the pandemic, to allow young people in Rothesay to get to school differently.

Making it easier and safer to walk, scoot or cycle to school along High Street and Townhead will also help people of all ages to get to the park, leisure centre, health centre, hospital or work. So it's important that the whole community takes part in developing any new design.

**Visit the website address below to email the design team, join the email mailing list and get involved with the design process.**

**www.rothesayschool.run**

Rather speak on the phone? Call icecream architecture on 07761 856 263

Argyll & Bute COUNCIL | Places for Everyone | Sustrans JOIN THE MOVEMENT | TRANSPORT SCOTLAND

Figure f.1. Rothesay 'New School Run' : Engagement Poster



### 4.3 Participants

The Engagement Strategy sought the participation of as broad an audience as possible in the design project. Naturally, different individuals will have different levels of interest or capacity to participate in the project.

Across the identified audiences (including the general public, young people / schools, community groups & organisations, and key destinations along the route), the Engagement Strategy therefore sought to ensure that:

- People are informed about the project.
- People are clear about how they can engage with the project team and the influence that they can have.
- When people do engage, participants are enabled to think collaboratively with the design team.

The team was particularly keen to reach out to people in lower-ranking SIMD areas, who generally tend to have fewer choices of mode of transport and may therefore be reliant on walking (in particular).

Engagement channels included a dedicated website [www.rothesayschool.run](http://www.rothesayschool.run), leafleting, poster campaigns, word of mouth, local networks, media releases, social media, public displays, on-street engagement and direct contact with schools, community organisations and representatives, and businesses, employers and destinations along the route.

Protected Characteristics were also taken into account and special efforts made to reach them; there is more detail in the Engagement Strategy.

### 4.4 Engagement stages

Three engagement stages were defined in the Engagement Strategy. Their objectives are outlined below, and the activities and results are detailed in the Engagement report.

#### Engagement stage 1: Fact-Finding

- Capture community aspirations for post-pandemic active travel in Rothesay.
- Understand how people currently travel to campus and other key trip generators (on High Street and Townhead), and why they travel in that way.
- Build a renewed local audience for the project.
- Check we are aware of all the key stakeholders.

#### Engagement stage 2: Design Options

- Share feasible design options for the public to consider their perceived strengths and weaknesses.
- Inform the design package (and possibly preferred route) to be taken forward.

#### Engagement stage 3: Preferred Design

- Share design of preferred route
- Seek feedback to inform the next stages of the design process, including gleaning what else needs to happen to support walking and cycling (for Behaviour Change Plan).

### 4.5 Engagement outputs

Please refer to the Engagement Report for details of the engagement outputs and how they influenced the design process.

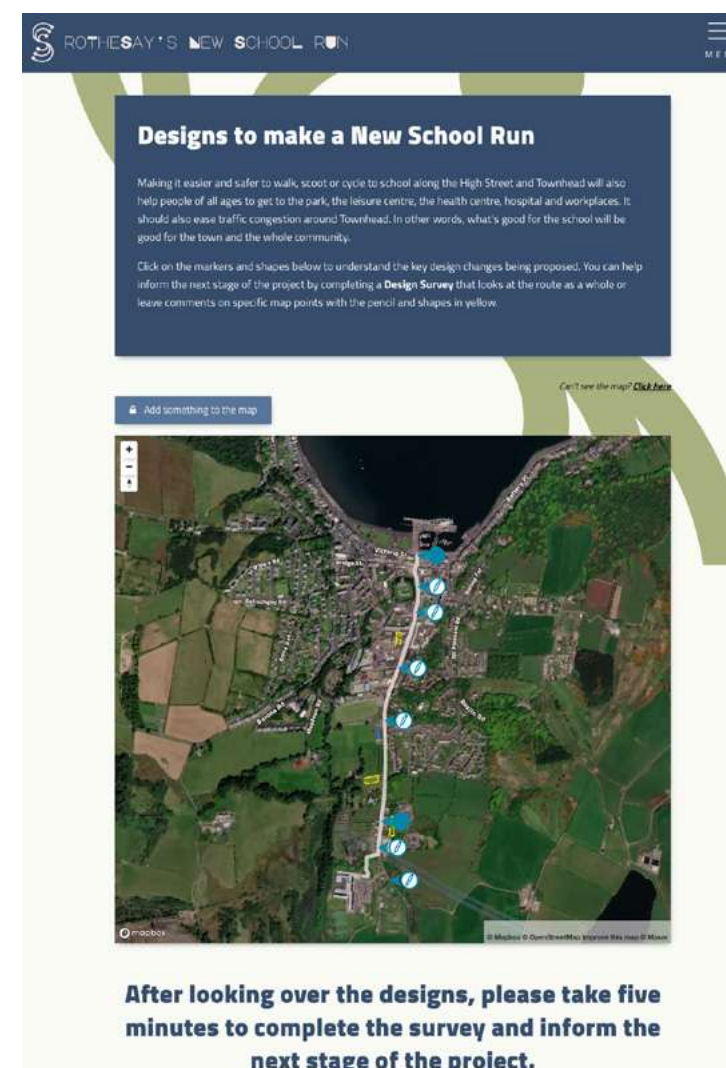


Figure f.2. Rothesay 'New School Run' : Engagement Website

## 5.0 Preferred Design

### 5.1 The key design principles

The developed design applied the principles identified through the technical surveys and engagement process to refine the ‘New School Run’ or safe active travel route:

- give space back to pedestrians
- reduce vehicle speeds and engender a more considerate driver behaviour
- improve accessibility
- reinforce the street environment
- modify driver behaviour
- create a caring and inclusive environment
- respect context

These build upon the five core design principles: **safety; coherence; directness; comfort and attractiveness.**

As per the brief a separate Bill has been prepared for each of the three sections that make up the safe active travel route, the ‘New School Run’:

Section 1 - ‘Castle’ 20mph zone	running from Victoria St junction with High St to just south of the junction with Stuart St (Including Zones 1 and 2 : predominantly assessed as <b>very sensitive</b> )
Section 2 - ‘Mid High Street’ 20mph limit	running from just south of the junction with Stuart St to the proposed build out on High Street south of the sports field entrance (Including Zones 3 and 4 : both a mix of <b>moderately sensitive</b> and <b>not sensitive</b> )
Section 3 - ‘Townhead’ 20mph zone	running from the proposed build out on High Street south of the sports field entrance to the new gateway feature proposed to the south of the Joint Campus entrance (Including Zones 5,6 and 7 : <b>very sensitive</b> in the proximity of St Mary’s Church and the cemetery but quickly transition to <b>not sensitive</b> on the edge of town light industrial development)

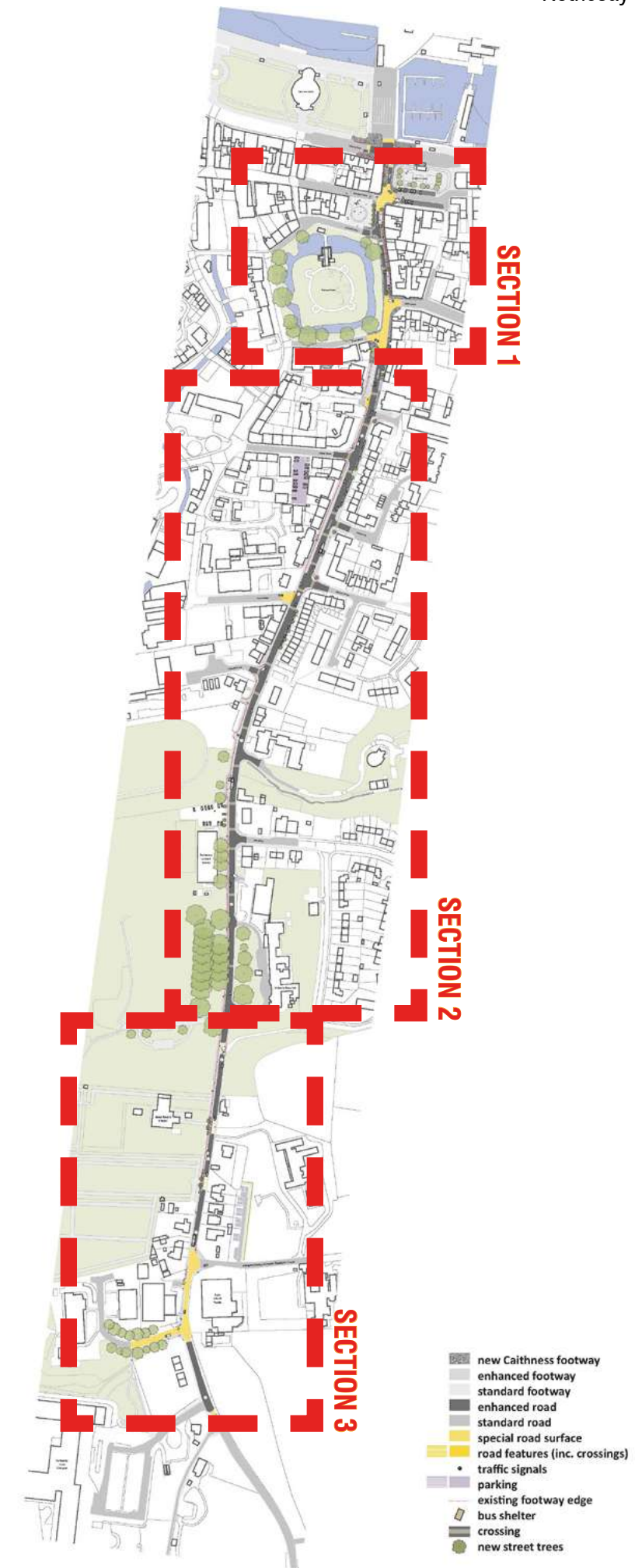


Figure g. illustrative masterplan (WMUD)



## 5.2 A consistent palette of materials

To provide a cohesion design solution and reinforce the perception of ‘The New School Run’ as an easily identifiable and distinctive route a **limited palette** of materials is used. Key surfaces such as carriageway, footway, kerbing etc. were subdivided into three categories: **standard, enhanced** or **feature**.

surface	quality	description
<b>carriageway</b>	standard	ABC standard road spec (coated 14mm aggregate)
	enhanced	ABC compliant road spec (clear coated 20mm granite aggregate)
	feature	natural stone setts
		applied surface (equivalent to anti-skid)
<b>junctions</b>	standard	ABC standard road spec (coated 14mm aggregate)
	enhanced	ABC compliant road spec (clear coated 20mm granite aggregate)
	feature	natural stone setts
		applied surface (equivalent to anti-skid)
<b>parking bays</b>	standard	ABC standard road spec (clear coated 14mm aggregate)
	enhanced	ABC compliant road spec (clear coated 20mm granite aggregate)
	feature	natural stone setts
		applied surface (equivalent to anti-skid)
<b>footway</b>	standard	ABC standard rolled asphalt concrete
	enhanced	ABC compliant rolled asphalt concrete (with 6mm coloured aggregate in matrix)
	feature	natural stone paving (Caithness to coordinate with existing)
<b>kerbing</b>	standard	PC standard units (100mm upstand)
	enhanced	Conservation kerb PC units (100mm upstand)
	feature	Natural stone (Whin stone)
		Natural stone (Granite)
	bus border	PC standard units

These were then specified along the route according to the **sensitivity of the immediate context, technical requirements and psychological traffic calming principles**.

## 5.3 Approach to car parking

Car parking proposals within the proposed scheme create 29 additional parking spaces.

type	existing	proposed
<b>Bicycle</b>	20	20
<b>Motorcycle</b>	6	4
<b>Bus</b>	6	6
<b>Standard (public)</b>	232	246
<b>Disabled (public)</b>	5	12
<b>Standard (private)</b>	197	207
<b>Disabled (private)</b>	12	12
<b>Total</b>	<b>478</b>	<b>507</b>

Car parking on High Street between Montague Street and Castle Street would reduce from 15 to 5.

The number of disabled spaces included in the above will increase from 2 to 3.

The number of parking spaces on Stuart street would reduce from 15 to 14.

The number of car parking spaces at the police station would reduce from 13 to 5, the new arrangement will include 1no. new disabled space.

The number of car parking spaces on the East side of High Street between No’s 81-133 would reduce from 12 to 10. This will contain one disabled space as at present.

A new off-street car park is proposed in redundant site accessed from Russell Street. This would have capacity for 30 standard and 5 disabled spaces. This car park would be accessible for local residents and public parking.

Parking on-street between No’s 72-86 would be restricted during the day. Note this would not apply to Sundays. As the existing bus stop would be formalised, the parking capacity here would reduce from 19 to 14.

Parking at the leisure centre would be reduced by 2 spaces from 24 to accommodate improved entry arrangements. Amended arrangements for disabled parking may be required.

On-street parking adjacent to the hospital would be limited.

A new off-street car park is proposed within the park area immediately North of the church. This would have capacity for 36 standard spaces. This car park would be accessible for local residents and public parking.

On-street parking at the church and cemetery would be restricted during the day. Note this would not apply to Sundays.

New off-street parking is proposed for the 'Townhead Cottages' properties. This would comprise two car parking spaces per house for the five properties on the East side of Townhead that currently have no off-street parking provision. Two additional parking spaces are proposed for visitors and/or to facilitate communal refuse collection. These facilities would be private and controlled by the residents. It is noted that other residences in the area already have off-street parking.

On-street parking on the approaches to, and through the proposed Townhead signals would be restricted at all times, with the exception of a few on-street spaces that would be restricted during the day.

On-street parking at the Wilkie Houses would be restricted during the day. Note this would not apply on Sundays.



## 5.4 Surface water management and drainage strategy

Existing surface water drainage is provided by road gullies along High Street. Existing gully locations on High Street and adjacent streets are highlighted on the General Arrangement drawings. In the absence of any other evidence, it is presumed that these connect to the combined sewerage system that leads from the schools joint campus to Victoria St/ Albert Place.

Though road gullies are not frequent, there appear to be adequate to avoid surface water problems in most locations. It is therefore proposed that existing gullies will be relocated to the new kerblines adjacent to their existing position and that existing gully tails (and therefore sewer connections) will be reused.

In general the proposed design is not increasing the impermeable area, simply reallocating existing roadway space as footway. The impact on surface water quantity is therefore anticipated to be negligible.

New car parking areas will incorporate permeable surfacing where appropriate, surface water attenuation, and petrol/oil interceptors as necessary to minimise impact.

A short area of the existing west footway from No. 92 to Cotton Mill Lane. Over this length there is a double kerb with upstand to both the roadway and footway sides. Roadway and footway are therefore at approximately the same level due to the low threshold levels of properties at No's 96 and 100. The upstand kerb prevents road water entering these properties. Resolution of this issue is deemed to be beyond the scope of this project as it would require replacement of the buildings.

## 5.5 Signage and line markings

The existing High Street has a significant amount of road markings and signage. Indeed since our original site visits further double-yellow lining has been applied to try to control indiscriminate parking in the Townhead area.

In general we have sought to minimise road markings however the design must take cognisance of the prevailing situation and the varied uses that occur on High Street and adjacent roads.

In general no centre line marking is to be provided. This is however necessary on the approach to signals and some junctions. Omitting the centre line helps to reduce vehicle speeds.

Give way markings are provided on busier side road junctions however it is proposed that Give Way signage, where currently provided, is removed.

The proposed design uses double yellow lines to protect the following:

- approaches to traffic signals
- approaches to junctions (based on 2.4m x 25m visibility splay)
- areas between narrowings needed for vehicle manoeuvres

The proposed design uses single yellow lines to limit on-street parking between the following times:

- Monday – Saturday, 0800 – 1800

Main proposed signage is shown on the GA drawings. A key to signage and markings diagram used is provided in **Appendix L**. Parking signage is not currently shown, this will be provided where required to reinforce parking regulation.

Project specific signage shown is already present on site.

There are a number of bespoke cast metal finger posts on site, these will remain.

### 5.6 Lighting strategy

Existing street lighting on High Street is considered to be adequate and therefore no significant changes are proposed. Luminaires on High Street have recently been replaced with LED's.

Lighting on Victoria Street and Albert Place is a combination of building mounted floodlights and lanterns on the South side, and ornamental columns on the North (shore) side.

Lighting in the section from Victoria Street to Castle Street is building mounted.

From Castle Street to the Rothesay Joint campus, street lighting is supported by 8m columns with short outstand brackets. This is commensurate with High Street being a bus route.

Additional feature lighting is proposed as follows:

- At seating and trees at Merkat Cross
- To new street trees at entrances to the church and cemetery
- To new circular seating/street tree features at enlarged corners at:
  - \* Broadcroft Lane
  - \* Church Lane
  - \* Minister's Brae

### 5.7 Traffic Regulation Orders

**Appendix N** contains speed control strategy plan for the High Street proposals. This shows the overall 20mph limit proposed for High Street between Victoria Street and the Rothesay Schools Joint Campus.

- 20mph zone 'Castle' Victoria Street – Merkat Cross
- 20mph limit 'Mid High Street' Police Station – Victoria Hospital
- 20mph zone 'Townhead' Church – Schools Joint Campus

Traffic Regulation Orders (TRO's) will be required to establish the permanent speed limits, parking controls and the raised table on Union St

### 5.8 Vehicle Swept Path Analysis

Vehicle swept path drawings are being prepared for the following vehicles:

- 26.5m FTA articulated truck
- 12m rigid bus
- 10m rigid truck

Swept path analysis will be carried on High Street with particular emphasis on narrowings and other horizontal deflections.

Entry to premises for appropriate larger vehicles will be checked.

Swept path analysis drawings will be provided in **Appendix O**.

### 5.9 Road Safety Audit

A Stage 2 Road Safety Audit (RSA) is being prepared for the proposed scheme by Wyllie Lodge Ltd. A copy of the RSA and the Designer's Response will be provided in **Appendix P**.

### 5.10 Land Take Plans

Land take plans are provided in **Appendix Q**, for the following locations:

- proposed new car park at Russell Street
- proposed new car park at park opposite hospital
- proposed new car park behind properties at Hospital Annex access
- proposed footway widening to rear of existing at Industrial access

In all cases the land involved is understood to be under the control of Argyll & Bute Council.



### 5.11 Section 1 - 'Castle' 20mph zone

This section is within the heart of Rothesay's historic core. It also represents an important gateway to the town, the centre of which Montague Street is not easily visible to visitors exiting the ferry terminal.

Connectivity between the ferry terminal and the town centre is currently being considered within a separate Access Strategy for the town whilst proposals to reconfigure the queueing arrangement for the ferry are also being developed. Consequently, at this point the developed design is proposing a tightening of road geometry to provide increased pedestrian space and a signalised Toucan crossing on Victoria Street to enable safe access to the town centre. In addition, elements of psychological traffic calming are introduced to influence speeds and alter driver behaviour. Feedback through the ongoing engagement process identified that many cyclists visiting the island will head either west towards Mount Stuart or east, via Port Bannatyne to Rhubodach and not straight into the town centre. As a general premise the existing footways have been significantly increased in width to accommodate greater numbers of pedestrians and provide space for other activities such as seating areas and street cafes, potentially around the Esplanade Hotel.

Guildford Square is an important orientation point flanking High Street (B881). This initial section of carriageway is one way southbound. There is a significant conflict at the junction with Montague Street where there is no clear pedestrian desire line. A loading bay and general disrespect of parking regulations leads to congestion on this junction which compromises visibility and pedestrian safety. The developed design treats the entire junction as a single entity using a special surface to emphasize that it is not a standard section of road and highlight potential hazards. The carriageway is narrowed both physically and visually. As part of a combination of measures, active footway uses; the deliberate lack of road lining; re-aligned road geometry and the introduction of street trees the character of this junction is significantly altered.

The retention of the formal loading and parking bays further contribute to reducing the speed of vehicles through this area which allows cyclists to integrate safely on the carriageway.

Preventative measures have been introduced along the eastern edge of the events space on the corner of High Street and Montague Street by the Roads Authority to prevent vehicles mounting the footway. This edge is reinforced by tree planting to provide a visual link to the setting of Rothesay Castle.

This is the only section of the developed design where the eastern footway is widened. This is to allow the businesses opposite the Castle to take advantage of the favourable orientation and dramatic view by providing additional space on the footway for activity. An increase in adjacent activities has been shown in previous traffic calming studies to contribute to slower vehicle speeds.

As the urban design appraisal identified this area as being a very sensitive zone the palette of enhanced and special materials is proposed.

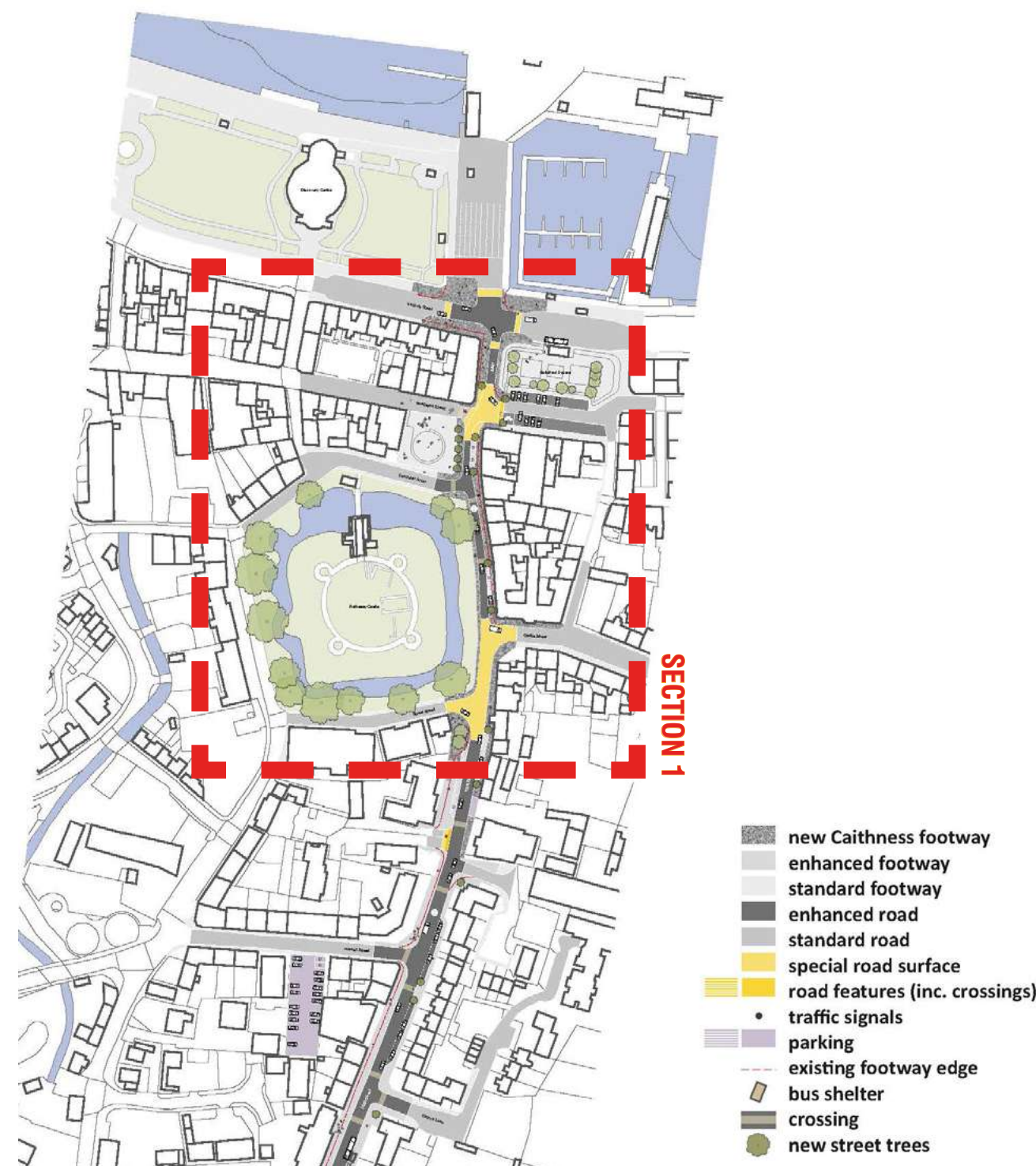


Figure g.1. illustrative masterplan - section 1



The section of carriageway between Castle Street and Stuart Street is treated in an identical way to the Montague Street junction – part of developing and then reinforcing a consistent approach along the route of ‘The New School Run’. At this point High Street is two way so there is only very limited opportunity to reduce the carriageway widths. This is achieved on the junction with Stuart Street where the geometry of the junction is tightened allowing the setting to the Mercat Cross to be marginally extended.

This area is also assessed as being very sensitive and the palette of enhanced and special materials is continued around the setting of the Mercat Cross. On the eastern footway this treatment continues to the end of the refurbished buildings.

The proposed Castle 20mph speed limit zone will start at the junction of High Street and Victoria Street with a gateway feature incorporating speed limit zone signage.

The proposed width of High Street is intended to gradually narrow from 4.5m at its Northern end to 3.5m between Montague Street and Castle Street. This means that over part of its length parallel parking is not possible and has therefore been reallocated as footway space on the East side.

The Montague Street/ High Street crossing point is defined by a change in surface colour and texture. Footway areas on the east side are extended and dropped kerb pedestrian crossings formalised. The coloured surface area is intended to represent a more pedestrian dominated area through which vehicles may pass. Part of this area will be defended by trees and other street furniture to extend the pedestrian area into the roadway, thus shortening crossings. Raised kerbs remain to define the pedestrian ‘safe zone’. Vehicles are required to make a sideways shift (similar to the existing situation) that promotes lower speeds in this sensitive area. Where there is a transition from footway to coloured road surface with no upstand, appropriate warning tactile paving will be required. The existing CCTV camera will remain. A loading facility for the adjacent retail units is accommodated at the junction. The existing setted crossing of Montague Street to the West is retained.

A brief narrowing to 3.0m roadway width is proposed near the southern end of this section to accommodate a dropped kerb pedestrian crossing. This feature helps to protect the disabled parking space immediately to its south and limit speeds on the approach to the Castle Street junction.

Between Castle Street and Stuart Street the roadway width increases to 6.8m. This needs to accommodate turning of large vehicles from High Street to Castle Street in both directions. This area is to be treated with a coloured surface to accentuate entry to the Castle 20mph zone and to encourage careful manoeuvring of larger vehicles.

The southern end of the Castle 20mph speed limit zone is located just south of the Mercat Cross. Appropriate signage to indicate entry to a 20mph speed limit is required and will form part of a gateway feature.





### 5.12 Section 2 - 'Mid High Street' 20mph limit

This section of the route is assessed as being predominantly of moderate sensitivity. It extends from just south of the Stuart Street junction to the entrance to St George's Field. A series of traffic calming measures are used repeatedly along this section of the route to reinforce the message and create a consistent character for the active travel route.

The interventions repeated consistently on the section include:

- increased footways, particularly on the western footway which is the preferred active travel pedestrian route
- road geometry is tightened to make crossing at junctions easier for pedestrians
- a low speed environment with a limit of 20mph will be enforced
- dropped kerbs are provided at regular intervals along the length to support accessibility
- formal parking bays are book-ended by trees to enclose distant views break up linearity
- longer parking bays are subdivided by trees
- seating areas and tree planting are introduced at focal corners as part of the strategy to provide regular resting places along the active travel route
- new car parks are provided to offset the relocation of on-street parking e.g. Russell Street and to the south of the leisure centre in St George's Field
- a continuous footway is provided at the junction with Union Street to support safer pedestrian access
- accesses for vehicle which cross the footway are relocated e.g. the new access into the recycling centre off Cotton Mill Lane or formalised e.g. the new access proposed into the leisure centre car park
- the buses now stop on carriageway the
- bus shelters are renewed and relocated to the edge of the carriageway

The roadway through this section is to be narrowed to 6.5m. This will accommodate passing by larger vehicles making the journey from to/from the harbour and town centre, and turning of larger vehicles in/out of the various industrial, retail and commercial premises located in this section.

The Minister's Brae/High Street junction forms horizontal shift, promoting lower vehicle speeds. This replicates the existing geometry but is accentuated by the widened footways.

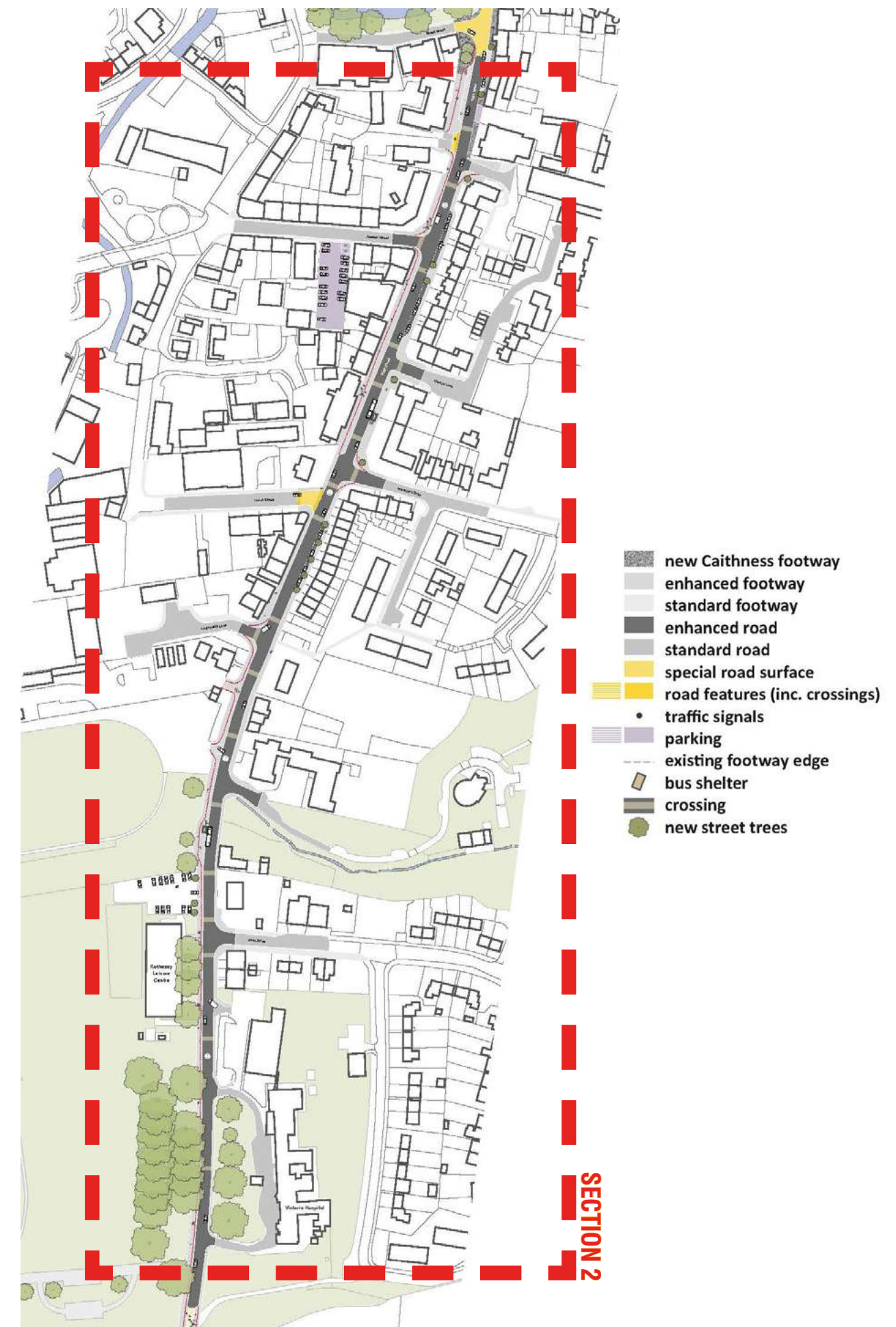


Figure g.2. illustrative masterplan - section 2





New dropped kerb pedestrian crossings are provided along High Street and on adjacent side streets. These will all be provided with appropriate tactile paving.

- This section includes access to:
- Police Station
- Hospital
- Health Centre
- Council depot
- Council offices
- Recycling centre
- Industrial units
- Commercial units
- Fire station
- Ambulance station

New dropped kerb accesses are proposed to the King George's Field recycling point, and Leisure Centre car parking areas. Footways at these vehicular crossing will be suitably reinforced. It is noted that the King George's Field is used for emergency helicopter landings associated with the nearby hospital.

New car parking facilities are proposed in this section at Russell Street and the park area immediately North of the church. Both of these will incorporate permeable surfaces where possible and petrol/oil interceptors as appropriate. Additionally surface water attenuation may be required.





### 5.13 Section 3 - 'Townhead' 20mph zone

This section of the route is assessed as being **very sensitive** in the proximity of St Mary's Church and the cemetery but quickly transitions to **not sensitive** on the edge of town light industrial development. This section extends from just north of St Mary's Chapel to just south of the joint Campus entrance.

This area, known as Townhead, is the most challenging in terms of being able to deliver the required change. Technical constraints led the design team to explore the advantages of signalling the principal section of this route. To alleviate congestion on the narrow carriageway opposite in front of the Townhead villas, off-street residents parking is being proposed to the rear of these properties.

At the entrances to St Mary's Chapel and the cemetery physical build outs are introduced to provide pedestrian 'spill-out' space which have the dual purpose of constraining the carriageway and reducing vehicle speeds. High quality natural stone paving, tree planting, seating and interpretative signing create an important pedestrian node on the route.

Applying the same ethos as used at the Montague Street and Stuart Street/ Castle Street junctions, the section of carriageway from the Hospital Annex access to the industrial units access is treated as a special junction. This surface treatment continues down the industrial unit access to the side entrance to the joint campus. In this context the junction will be signalled and the area designated a 20mph zone to maximise the safety of all users at this potential conflict point. The footway to the southern side of the industrial access will be widened to provide a clear pedestrian refuge albeit vehicle access to the units is limited and Bute Island Foods make a conscious effort to take deliveries out with peak school hours. The overarching objective is to encourage all users to entry the school campus via this side gate.

Engagement with the schools is ongoing with consideration being given to the relocation of bike storage and parking facilities closer to the buildings.

At the southern extremity, just south of the Joint Campus entrance, a 'gateway' feature is introduced to ensure that vehicle traffic is made aware that it is entering a different regime. The carriageway surfacing returns to standard after this feature as the safe active travel route ends and the 'street' transitions back to a standard rural road.

Townhead forms the most challenging section of this route from an Engineering point of view. The road corridor is severely constrained by existing features including property boundary walls, graveyard and boundary wall (listed), and a retaining wall to eastern Bute Island Foods site.

A road narrowing gateway (3.5m wide) is to be provided at the southern limit of this section. This co-incides with a path from Wallace Avenue emerging from the East and therefore incorporates a new shortened pedestrian dropped kerb crossing point. This gateway will form the start of the Townhead 20mph speed limit zone.

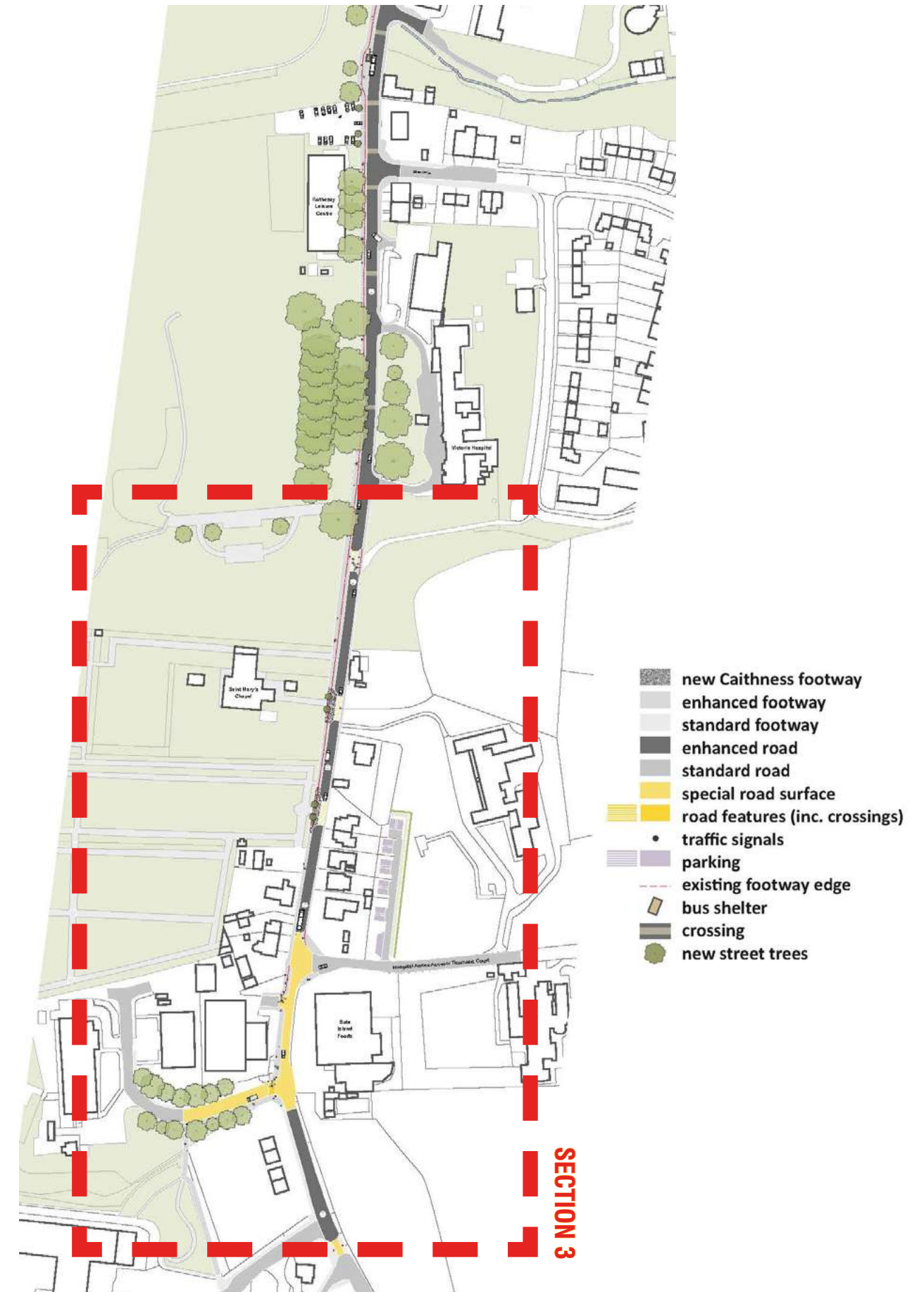


Figure g.3. illustrative masterplan - section 3



Roadway width is to be narrowed to 5.5m from this narrowing point generally through this section however as this is the same width as parts of the existing road, this does not result in widened footway in all locations.

Widening of the East footway in the northern part of this section (adjacent to the church and graveyard) is achieved and assisted by two buildouts (narrowing the roadway to 3.5m) to accentuate the entrances to the church and graveyard and provide vehicle speed control.

There is an 80m length from cemetery Cottage to the Hospital Annex access where no widening of the existing footway (min width 1.3m) is possible.

New car parking provision is to be provided for five properties on the east side of Townhead. These properties (immediately north of the Hospital Annex access, have no existing off-street car parking provision. A new facility providing two car parking spaces per property and a communal space for two visitors and/or communal refuse collection is proposed to the rear (East) of these properties within ground currently controlled by the Thomson Home, but ultimately under the ownership of the local authority. This new facility would incorporate permeable surfacing. It is anticipated that this facility would fall under the joint control of the residents and therefore be private parking.



Widening of the East footway over the part of this section between the Hospital Annex access and the Industrial Access is achieved by introducing new traffic signals. This allows the roadway to be narrowed to 4.5m between these points and the subsequent space reallocated as footway.

A new Puffin crossing is proposed across the Industrial access road bellmouth to guide school pupils to the widened footway on the South side. This is proposed as 4m wide to accommodate peak pedestrian flows, requiring additional request points. The timing of operation of this crossing should reflect the peak demand times at the start and end of the school day.

The stop-line on the industrial access is set back from the junction to accommodate vehicular traffic entering the new Bute Island Foods chiller unit and the proposed Puffin crossing.

The southern footway of the industrial access between its junction with Townhead and the pedestrian access to the school is to be widened to 3m. Due to the requirement for larger vehicles to access the factories, and as a result of its geometry, widening into the roadway is not deemed possible here. Widening of the footway to the rear is therefore proposed.

Widening of the existing footbridge (crossing a minor watercourse) into the school campus is proposed, along with widening of the path entering, and within the school campus to 3m. A road narrowing (to 3.5m) is proposed on Townhead immediately South of the Schools Joint campus entrance. This would give priority to southbound vehicles (i.e. leaving the 20mph zone). This narrowing would form the southern end of the Townhead 20mph speed limit zone. To the South there is an existing 30mph limit as far as the Crossbeg property at the top of the hill.



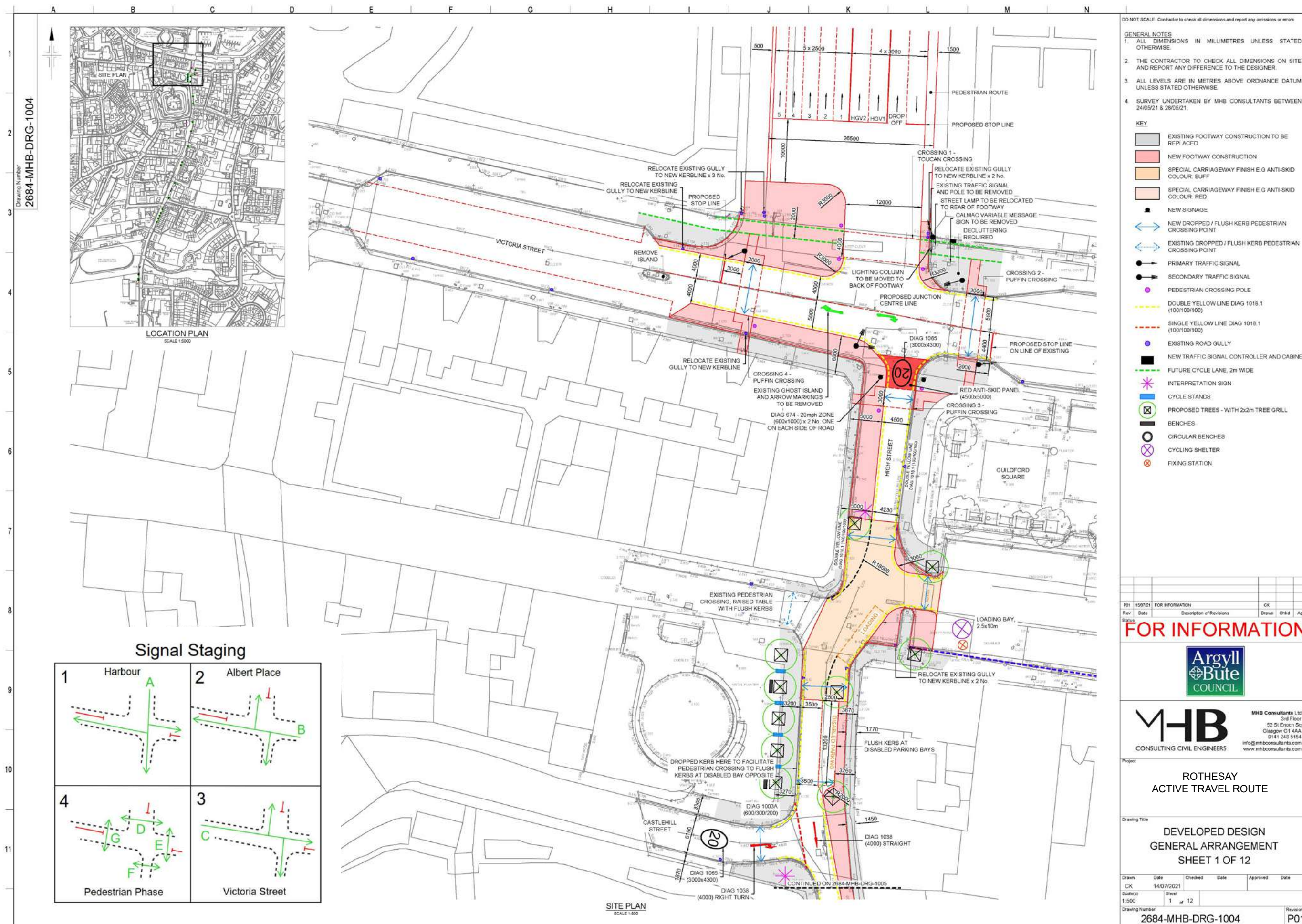


Figure h.1. general arrangement plan (1)



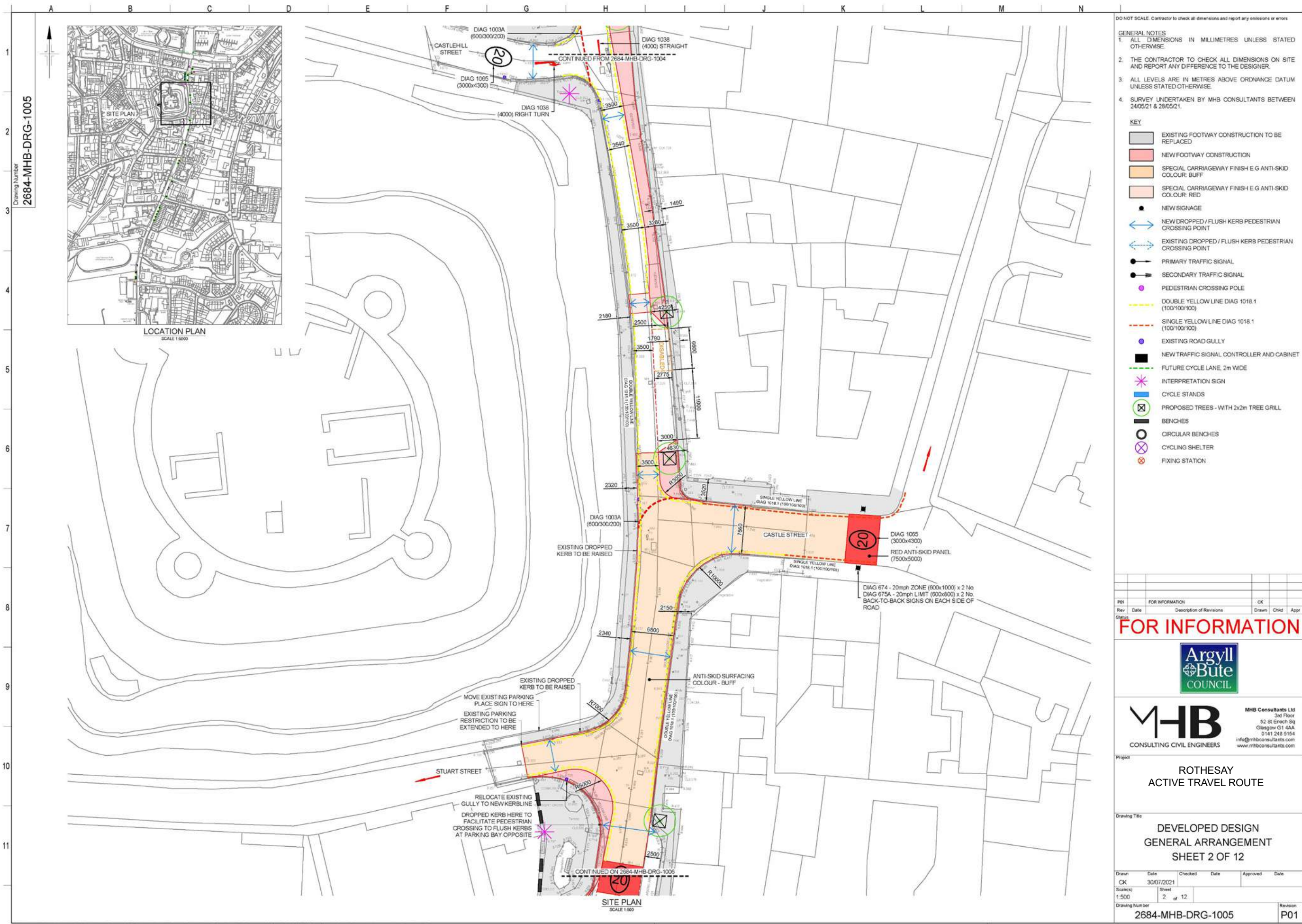
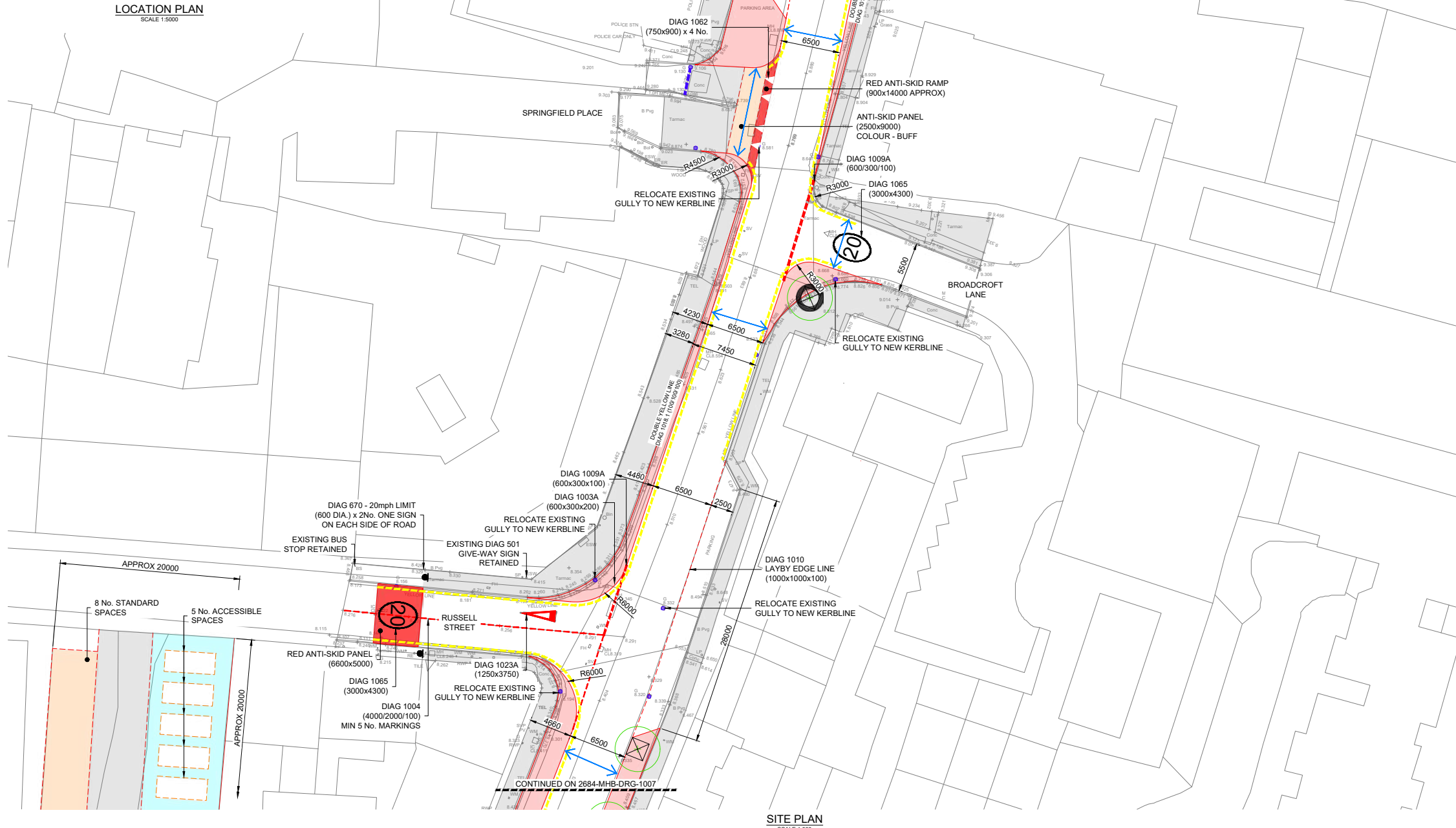
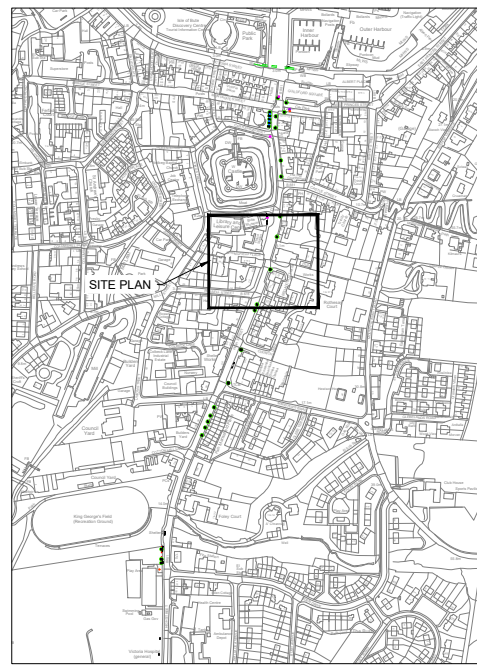


Figure h.2. general arrangement plan (2)



2684-MHB-DRG-1006



DO NOT SCALE. Contractor to check all dimensions and report any omissions or errors

- GENERAL NOTES**
- ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE.
  - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE AND REPORT ANY DIFFERENCE TO THE DESIGNER.
  - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS STATED OTHERWISE.
  - SURVEY UNDERTAKEN BY MHB CONSULTANTS BETWEEN 24/05/21 & 28/05/21.

- KEY**
- EXISTING FOOTWAY CONSTRUCTION TO BE REPLACED
  - NEW FOOTWAY CONSTRUCTION
  - SPECIAL CARRIAGEWAY FINISH E.G ANTI-SKID COLOUR: BUFF
  - SPECIAL CARRIAGEWAY FINISH E.G ANTI-SKID COLOUR: RED
  - NEW SIGNAGE
  - NEW DROPPED / FLUSH KERB PEDESTRIAN CROSSING POINT
  - EXISTING DROPPED / FLUSH KERB PEDESTRIAN CROSSING POINT
  - PRIMARY TRAFFIC SIGNAL
  - SECONDARY TRAFFIC SIGNAL
  - PEDESTRIAN CROSSING POLE
  - DOUBLE YELLOW LINE DIAG 1018.1 (100/100/100)
  - SINGLE YELLOW LINE DIAG 1018.1 (100/100/100)
  - EXISTING ROAD GULLY
  - NEW TRAFFIC SIGNAL CONTROLLER AND CABINET
  - FUTURE CYCLE LANE, 2m WIDE
  - INTERPRETATION SIGN
  - CYCLE STANDS
  - PROPOSED TREES - WITH 2x2m TREE GRILL
  - BENCHES
  - CIRCULAR BENCHES
  - CYCLING SHELTER
  - FIXING STATION

P01	FOR INFORMATION	CK	
Rev	Date	Description of Revisions	Drawn Chkd Appr
Status			
<b>FOR INFORMATION</b>			
MHB Consultants Ltd 3rd Floor 52 St Enoch Sq Glasgow G1 4AA 0141 248 5154 info@mhbconsultants.com www.mhbconsultants.com			
<b>ROTHESAY ACTIVE TRAVEL ROUTE</b>			
Drawing Title <b>DEVELOPED DESIGN GENERAL ARRANGEMENT SHEET 3 OF 12</b>			
Drawn	Date	Checked	Date
CK	30/07/2021		
Scale(s)	Sheet	Approved Date	
1:500	3 of 12		
Drawing Number	Revision		
2684-MHB-DRG-1006	P01		

Figure h.3. general arrangement plan (3)



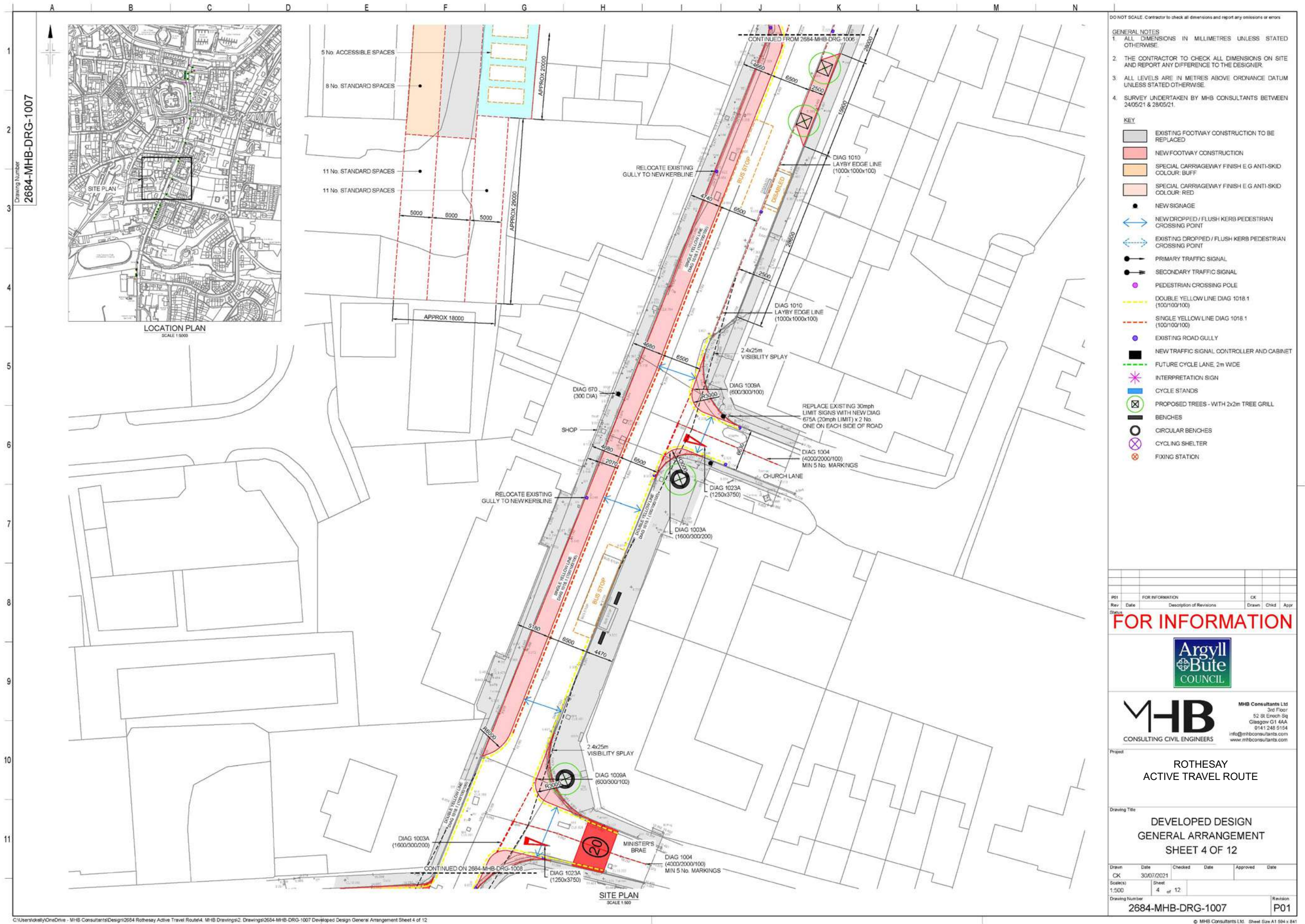


Figure h.4. general arrangement plan (4)



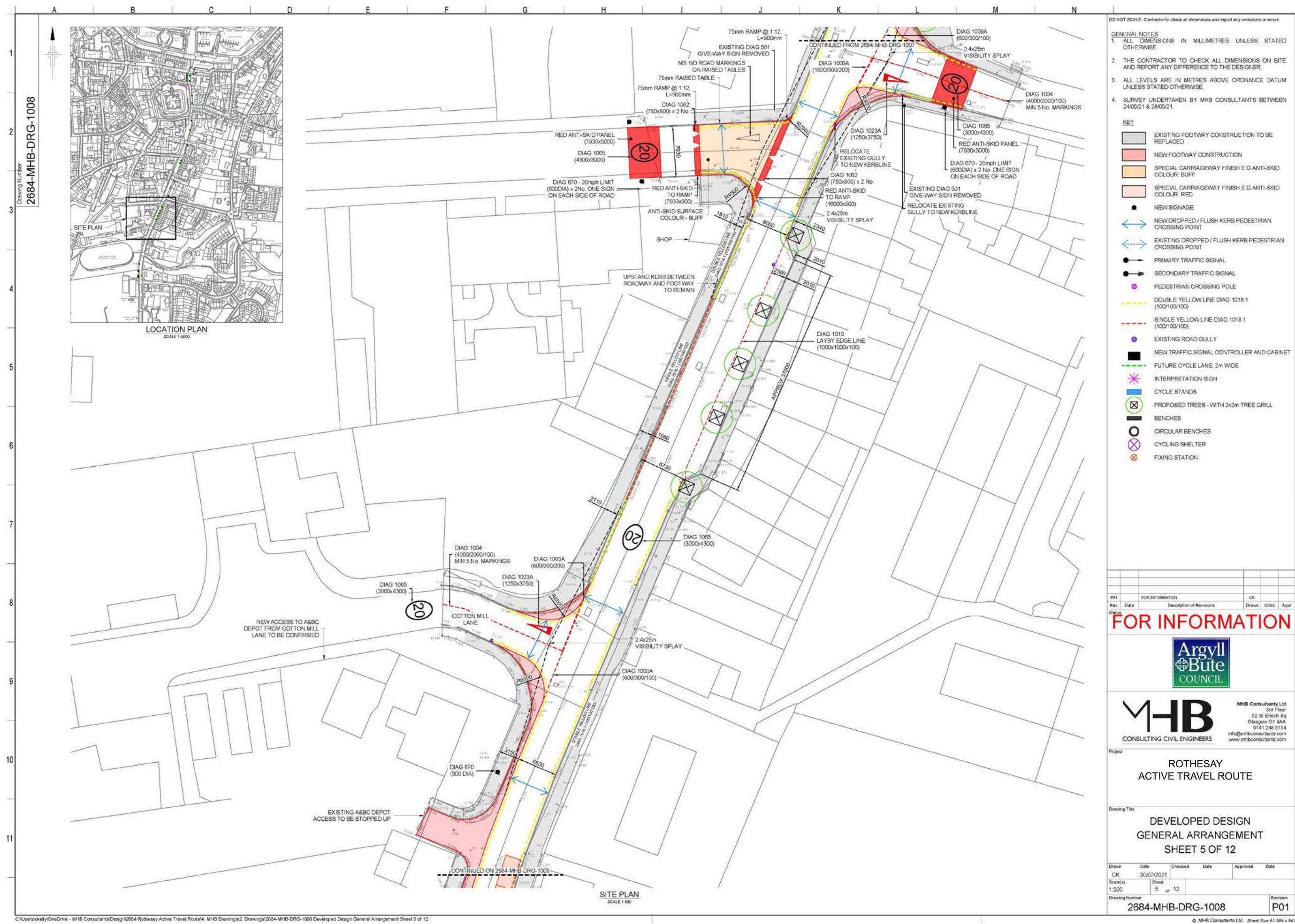


Figure h.5. general arrangement plan (5)



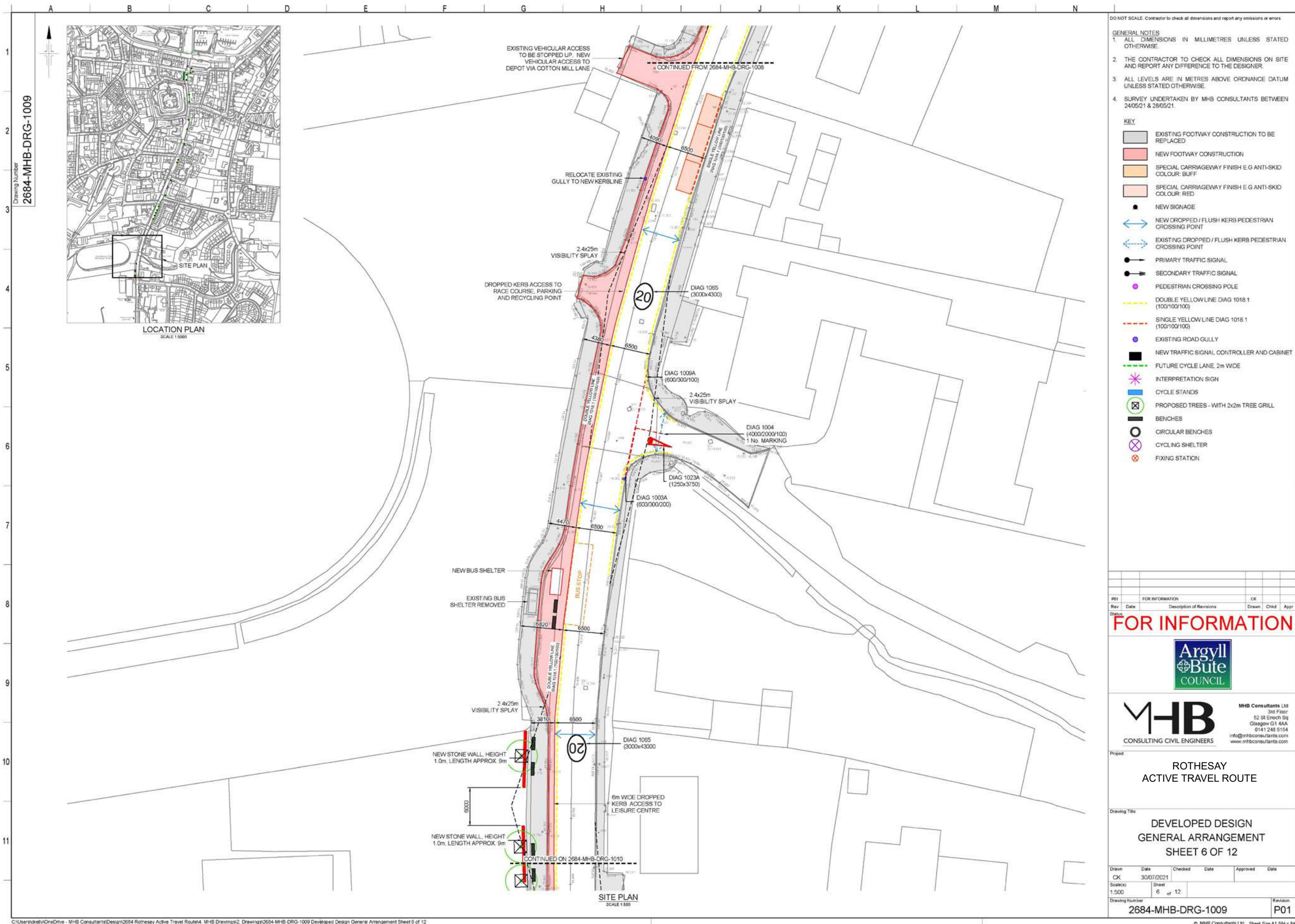


Figure h.6. general arrangement plan (6)





Figure h.7. general arrangement plan (7)



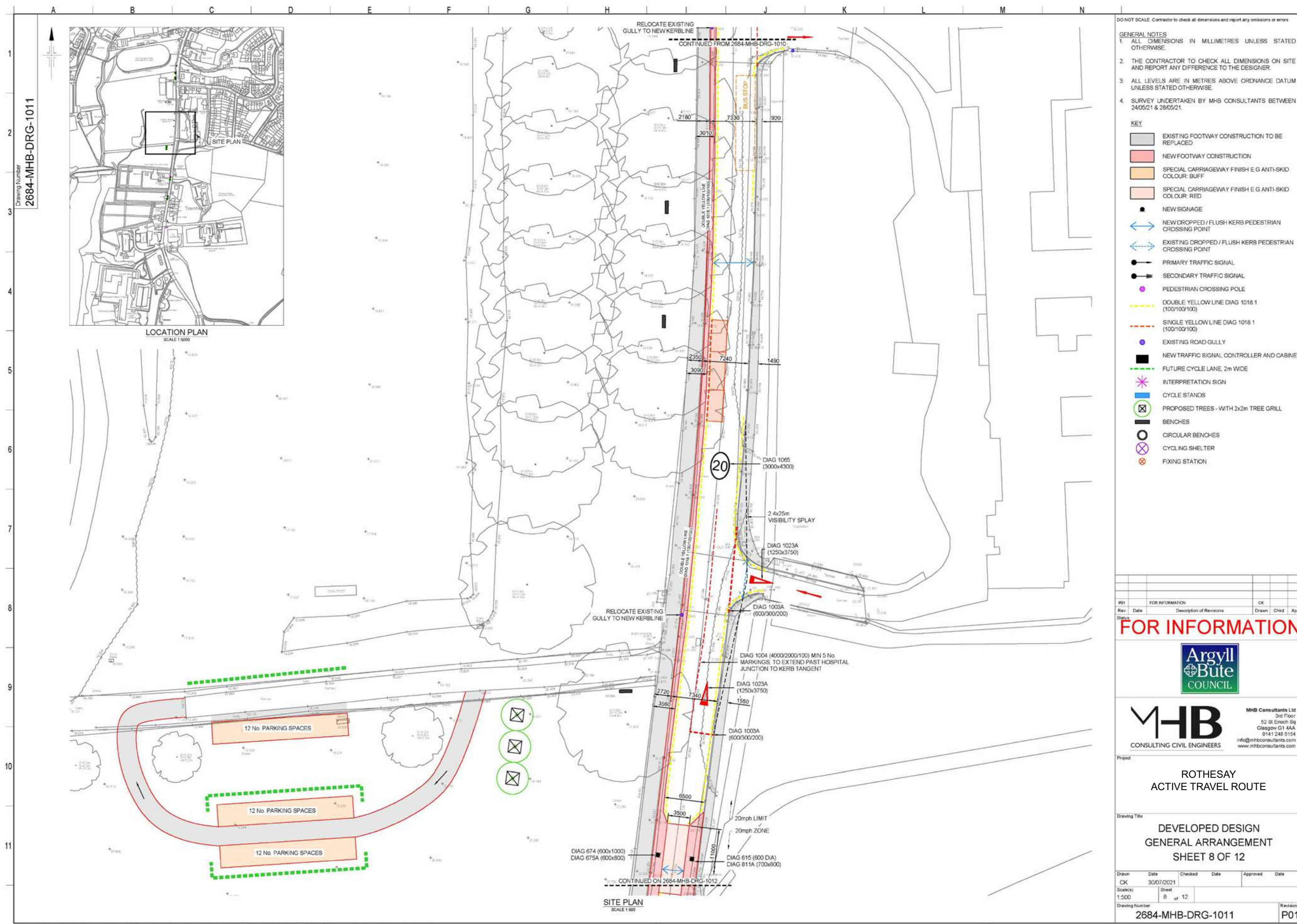


Figure h.8. general arrangement plan (8)





Figure h.9. general arrangement plan (9)



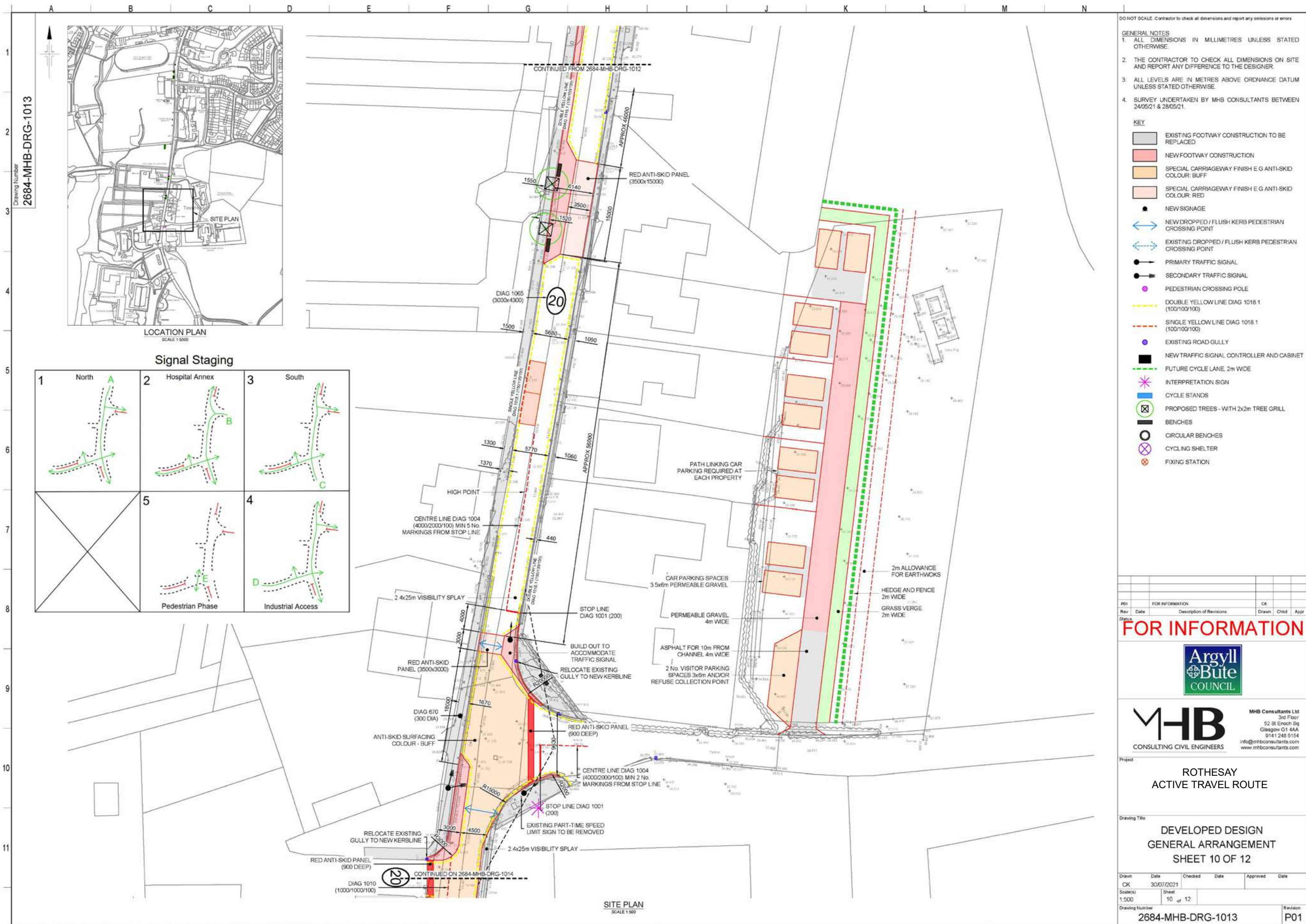


Figure h.10. general arrangement plan (10)



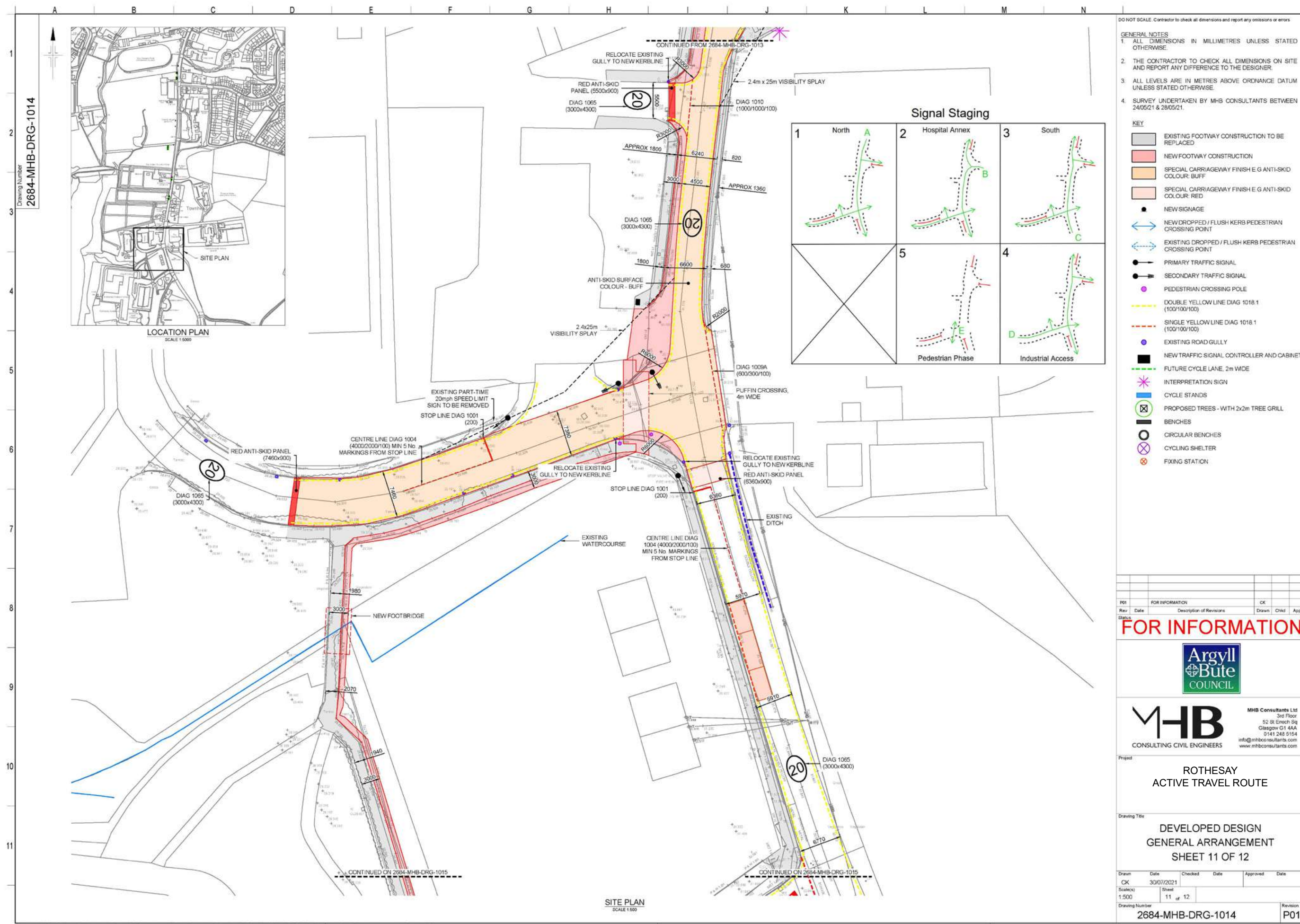


Figure h.11. general arrangement plan (11)



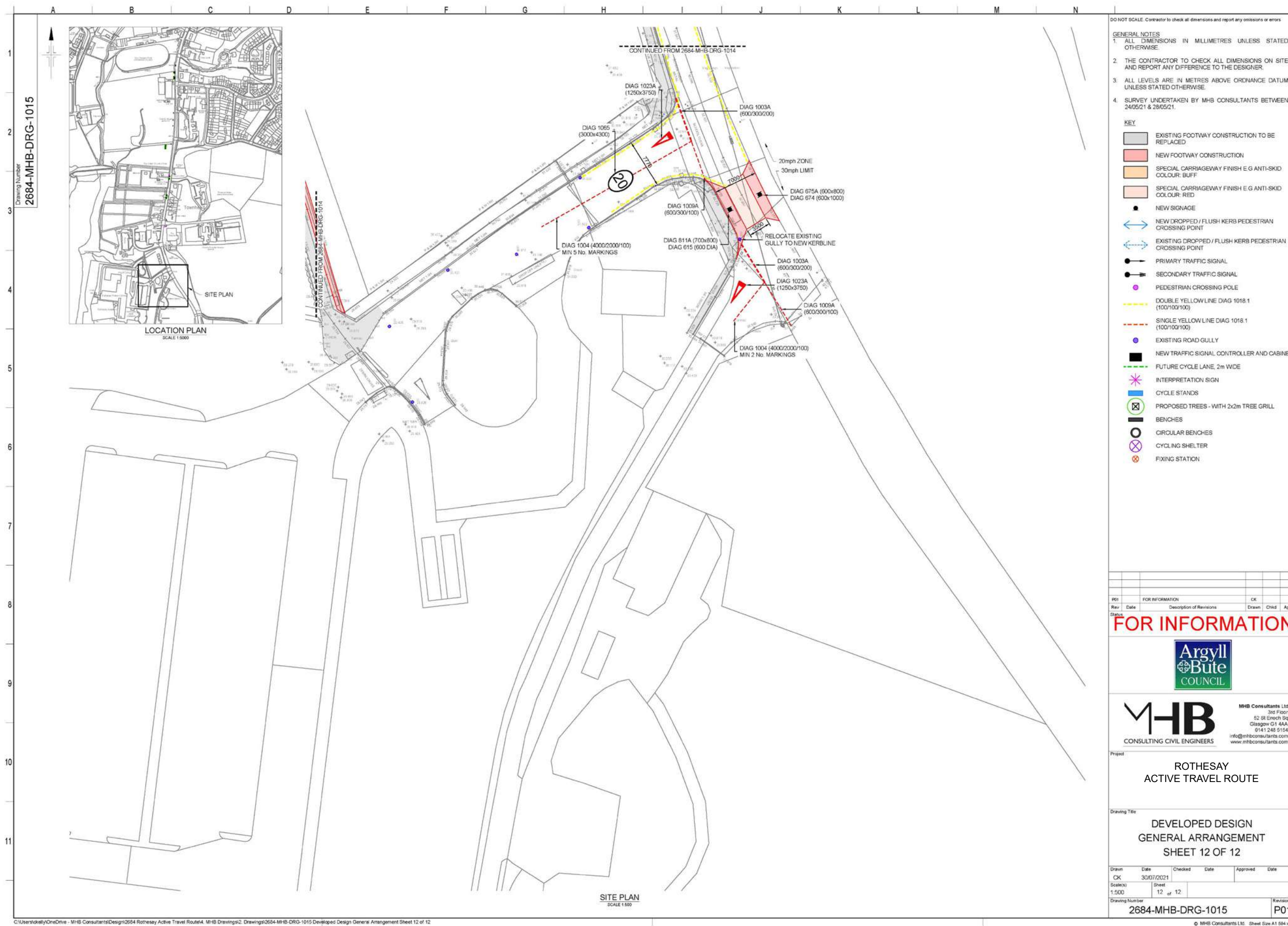


Figure h.12. general arrangement plan (12)



## 6.0 Costs

### 6.1 Preparation of DRAFT Bill(s) of Quantity

In accordance with Stage 3 requirements **draft Bill(s) of Quantity** have been prepared for the Developed Design and these have informed the preparation of the outline cost.

As per the brief a separate Bill has been prepared for each of the three sections that make up the safe active travel route, the ‘New School Run’:

Section 1 - ‘Castle’ 20mph zone	running from Victoria St junction with High St to just south of the junction with Stuart St
Section 2 - ‘Mid High Street’ 20mph limit	running from just south of the junction with Stuart St to the proposed build out on High Street south of the sports field entrance
Section 3 - ‘Townhead’ 20mph zone	running from the proposed build out on High Street south of the sports field entrance to the new gateway feature proposed to the south of the Joint Campus entrance

### 6.2 The contractual impact of being on an island

The single most impactful factor on the works price is that Rothesay is on an island. This fact needs to be borne in mind when reviewing the cost plan and individual rates. Things to consider include:

- that all materials need to be **brought onto the island by boat** (this involves down time for the vehicle and driver on the ferry)
- where ‘waste’ materials cannot be **recycled** on the island, and this is the first priority, they need to be **transported off the island** to the nearest licensed tip
- it is assumed that where the **contractor’s workforce** is not local, it is more economic for them to stay on the island from Monday to Thursday
- it is not always possible to get best value as the contracting market is restricted to those that are prepared to or have the capacity to take on the inconvenience of a **non-standard project**

In addition, the **current market is highly volatile** given the impact of COVID and BREXIT.

All the above factors have been taken into consideration when preparing the cost estimate.

### 6.3 cost estimate

The cost estimate is itemised against the three sections as follows:

<i>Section 1</i>	£1,123,019.70
<i>Section 2</i>	£1,683,686.40
<i>Section 3</i>	£1,117,421.80
Total amount	£3,924,127.90

Whether the works are undertaken as one **single contract or three separate contracts** as proposed the Preliminaries will remain the same at approximately 10% of the overall cost.

All the rates have been verified with suppliers and reflect the current market (September 2021).

By the time the works go to the market the elements addressed under prime cost or provisional sums could be further refined and measured to provide **greater cost certainty** at the time the works are tendered. This may realise a saving against the outline cost.

## 7.0 Delivery

### 7.1 Construction sequencing

From the outset it became apparent that the **safe active travel route** between the ferry terminal and the historic town centre in the north and the joint schools' campus in the south could be split into several zones depending on the selection criteria applied such as **need** (in terms of addressing safety issues), **urban design sensitivity** or approach to **traffic calming interventions**.

When considering construction sequencing and phasing three sections were identified based on the type and scale of intervention required:

Section 1 - 'Castle' 20mph zone	running from Victoria St junction with High St to just south of the junction with Stuart St
Section 2 - 'Mid High Street' 20mph limit	running from just south of the junction with Stuart St to the proposed build out on High Street south of the sports field entrance
Section 3 - 'Townhead' 20mph zone	running from the proposed build out on High Street south of the sports field entrance to the new gateway feature proposed to the south of the Joint Campus entrance

#### Construction Phase 1

This would comprise of the works identified under **Section 3 – 'Townhead' 20mph zone** for two key reasons:

**need:** the Townhead area currently presents the greatest risk with most significant conflict between pedestrian, wheelers and cyclists and vehicle users on the proposed 'New School Run'.

**constructability:** given the Joint Campus's location all materials need to be brought to the site via High Street which is exceptionally narrow within Rothesay's historic core. **Best practice** is to start at the farthest end of the route so that site traffic is not travelling through recently completed works.

#### Construction Phase 2

This would comprise of the works identified under **Section 2 - 'Mid High Street' 20mph limit**.

**need:** this section of the route represents a significant length of the proposed 'New School Run' where reallocating space to pedestrians and moderating driver behaviour will have a significant benefit on **safety**.

**constructability:** This continues the application of **best practice** by ensuring that site traffic is not travelling through recently completed works.

#### Construction Phase 3

This would comprise of the works identified under **Section 1 - 'Castle' 20mph zone**.

**need:** notwithstanding the need for a coherent and continuous approach to the proposed 'New School Run' which starts within Rothesay town centre, providing for local residents and tourists, it is also predicated upon and needs to compliment other works proposed within the town centre including the Spatial Strategy review and proposed redevelopment of the approach to the ferry terminal. The objective is to protect any capital spent on public realm improvements in this area and importantly, avoid abortive works.

**constructability:** an experienced contractor with exemplary traffic management and quality of workmanship will be required to support the delivery of the required high quality public realm works in the historic core of Rothesay.

### 7.2 The importance of the 'route'

Whilst three construction phases have been proposed, to achieve the **desired behavioural change** all three contiguous phases are required to be completed.



## 8.0 Monitoring and Evaluation

### 8.1 The aim

It is important that the effectiveness of projects be monitored and evaluated. To do this project must be evaluated against set objectives and broader goals. The steps involved are to:

- Set **targets** linked to the stated objectives;
- Identify appropriate **indicators** that measure the progress towards targets; and
- **Evaluate** the change in the selected indicators.

### 8.2 Targets

- Take part in Walk to school week (usually early June) [5]
- Increase walking and cycling in the community generally
- Promote Cycle Friendly School awards (for Joint Campus – primary and secondary)
- Take part in ‘Bike to School’ week (usually in late September) [2]
- Promote Cyclists Welcome scheme
- Promote Cycle Friendly Employer awards, add 2 by 2025
- Take part in ‘Bike Week’ (usually early June) [3]

### 8.3 Indicators

- Show general year-on-year increase in walking and cycling
- Reduce vehicle speeds on High Street/Townhead to <20mph (85%ile) by 2025
- Increase cycling to school by at least 10% by 2025 [4]
- Increase cycling to work by at least 7% by 2025 [4]

### 8.4 Evaluate

- Annual walking survey online/paper
- Annual cycle survey online/paper
- Hands up surveys (at schools and organisations) annual or more frequently
- Traffic speed surveys (within 20mph limit) on High Street at 3 locations
- Monitor accident statistics (e.g. [www.crashmap.co.uk](http://www.crashmap.co.uk))
- Physical count survey of pedestrians and cyclists at key points internal and external to community
- Record/publish improvement works to existing network



## 8.5 Potential Monitoring Partners

- Council/Government
- Argyll & Bute Council
- Bute Community Council
- Historic Environment Scotland
- Health
- The Bute Surgery (GP surgery)
- Victoria Hospital (NHS Highland)
- Schools
- North Bute Primary School
- St Andrew's Primary School
- Rothesay Joint Campus comprising:
- Rothesay Primary Early learning and Childcare
- Rothesay Primary Primary School
- Rothesay Academy
- Argyll College UHI
- Nursery Schools
- Abbey Nursery
- Youth Organisations
- Scouts (1st Bute)
- Boys Brigade (1st Rothesay)
- Girls Brigade (1st Rothesay)
- Churches
- United Church of Bute
- Shops
- High Spirits Drinks
- Robert Ewing & Co
- Musicker
- The Castle Gallery
- Harry Haws
- The Coffee Stop
- P&D's newsagent & grocer
- Dil's newsagent
- Businesses
- Esplanade Hotel
- Wm Skelton & Co solicitors
- Isle of Bute Gin
- D McKellar undertakers

- John MacKirdy Limited (hauliers)
- Bute island Foods
- Flexible Technology
- Sports
- Rothesay leisure centre
- Bute Community Cycling Group
- Bute Wheelers Cycling Club
- Bute County Cricket Club
- Isle of Bute Shinty and Amateur Athletics Club
- Other
- Calmac
- Foley Court
- Thomson Court

## 8.6 References

- [1] Cycling by Design (Scot. Govt. 2010)
- [2] Bike to School week ([www.sustrans.org.uk/our-blog/projects/uk-wide/schools/bike-to-school-week](http://www.sustrans.org.uk/our-blog/projects/uk-wide/schools/bike-to-school-week))
- [3] Bike Week ([www.cycling.scot/bike-week](http://www.cycling.scot/bike-week))
- [4] Argyll and Bute Council Cycling Action Plan Oct 2012 ([https://www.argyll-bute.gov.uk/sites/default/files/active\\_travel\\_active\\_scotland\\_committee\\_report\\_-\\_october\\_2012.pdf](https://www.argyll-bute.gov.uk/sites/default/files/active_travel_active_scotland_committee_report_-_october_2012.pdf))
- [5] Walk to School Week ([www.livingstreets.org.uk/products-and-services/projects/walk-to-school-week](http://www.livingstreets.org.uk/products-and-services/projects/walk-to-school-week))



## 9.0 Next Steps

### 9.1 Stage 4 priorities

Within the next stage of the technical design attention will focus on alleviating the identified technical challenges.

### 9.2 Imminent Changes

Argyll and Bute Council is in the process of introducing a new Traffic Regulation Order on a section of Townhead to alleviate some of the identified concerns. This was advertised on the 17th September 2021 and will be effective imminently. This will provide the **opportunity to monitor behaviour** change against the baseline survey data collated as part of this study.

### 9.2 Future Changes

Uniquely, drivers on Bute could obtain their driving license without having experienced either traffic signals or roundabouts until recently. Going forward this study recommends that due to the very constricted road corridor the use of technology i.e. intelligent traffic signals with integrated monitoring equipment is the best solution to improve safety for all and manage potential conflict between the various users within Townhead – the most challenging section of the active travel route.

Subject to funding and committee approvals etc. there will potentially be a time lapse prior to the conclusion of Stage 4 albeit the desire is to keep this to the minimum and maintain **project momentum**. Whilst several initiatives to 'trial' traffic calming schemes have been raised as part of the ongoing engagement process their timing is critical to their success. In order to achieve and maintain the desired change in behaviour it is important that the time delay between any trial and commencement of the permanent works is kept as short as possible. To succeed the proposed **Townhead signalised section** requires the new kerb alignment to be installed. Once this is in place the timing of the traffic signals including balancing pedestrian/cycle crossing times; peak and off-peak flow operation will be **triated and monitored** to ensure the system works effectively balancing the desired change in user behaviour with mitigating unnecessary user frustration.

Once this section is implemented it will allow temporary installations on the other sections of the active travel route to be considered.

## 10.0 The team : roles and responsibilities

### 10.1 Team

To meet the particular context, challenges, scope of works and the required time scales (a 5 month project) together with the challenges of delivering such a project within the physical constraints of the island of Bute and COVID informed the size, skill set and experience of the Team.

The roles and responsibilities of each team member are set out below:

skills : roles and responsibility	delivery : by practice
project management	Benton Scott-Simmons
placemaking / landscape design / graphic design / community led design facilitation / design and technical engagement / climate change mitigation / CAD support	Benton Scott-Simmons
placemaking / urban design / enagement graphics	WMUD
community engagement lead / community led design facilitation	Icecream Architecture
landowner engagement lead / community led design facilitation	Nick Wright Planning
civil engineering / CAD	Nicol Urban Design
structural engineering / geotechnical / CAD	MHB Consultants
ecological appraisal / identifying biodiversity targets	HEL
cost control / quantity surveying	Barrett Commercial



**Benton Scott-Simmons**  
*www.bentonscottsimmons.com*

**Nicol Urban Design**  
*david@nicolurbandesign.com*

**icecream architecture**  
*www.icecreamarchitecture.com*

**Willie Miller Urban Design**  
*www.williemiller.com*

**MHB Consultants**  
*www.mhbconsultants.com*

**Barrett Commercial**  
*www.barrettcommercial.com*

**Nick Wright Planning**  
*www.nickwrightplanning.co.uk*

**Heritage Environmental**  
*www.heritage-environmental.co.uk*

